## TREEHOUSE: Between People & Nature Transforming Tourism & Culture in Maine

Abigail Donahue

Nicole Koltick

Graduate Thesis 2022



#### Table of Contents

- Project Description
- Literature Review
- Topic Presentation
- Design Probes
- Design Brief
- Concept
- Precedent Analysis
- Design Research
  - Program and Site
  - Summary: Research-to-Design Intent
- Case Study + Interview

- Design Process
- Initial Programming
- Site Documentation for Programming
- Initial Material Palettes
- Program in Site
- Code Research
- Final Design
- Treehouses
  - Event Hall
  - Spa
  - Restauraunt
  - Materials
  - Sources

#### **Project Description**

Humans have an intrinsic psychological need to connect with nature and the natural environment. When looking at the transition between urban environments full of people and architecture and natural environments full of trees and nature, treehouses exist as a combination of the two. The experience of being in a treehouse brings one to a deeper and more personal connection with nature.

The State of Maine has an abundance of nature, and boasts a 90% forest coverage and world class National Parks and beaches. Maine also suffers an aging and dwindling population and will face a crisis in the next few decades. To boost the workforce and bring attention to Maine's natural beauty, this project aims to work with local initiatives and use treehouse architecture to build a luxury hotel experience that brings guests closer to the nature around them.

The location of Wolfe's Neck Woods State Park in Freeport, ME brings guests and tourists outside of the city and into sub-rural Midcoast Maine to enjoy the ammenities of the town's outlet mall as well as one of Maine's charming historic downtowns. The state park provides walking trails along the Harraseekett River and the Gulf of Maine. Proceeds from the hotel will go to the National Park Service for maintenance of the park.

The hotel, named Pine Tree Lodge, will generate jobs through its hotel opperations, spa, restauraunt, and event hall. The treehouse guest rooms will provide a taste of Maine style and showcase picturesque frames of the surrounding landscape. The project as a whole is designed with Maine made and/or sourced products, finishes, and staging items to highlight Maine's businesses and culture.

# Literature Review: Treehouse: Between People and Nature

#### INTRODUCTION

When you imagine a treehouse, what do you see? The plywood and 2x4 platforms of American childhood and adventure (McKinney 2018)? Maybe you imagine a fictional treehouse brought to life in a fictional story book (Meyers 2016). Regardless of the answers to these questions, there is an irrefutable sense of freedom and power that is instilled as you climb the branches of the tree and into their lofty platform (Nelson 2020). Within the embrace of the branches, you are held above the earth and brought to intimate connection with Mother Nature (Nelson 2020). There are few other, if any, spaces that provide this immersion as deeply and as strongly as the treehouse. So much so, that in the search to rekindle that excitement and freedom, architects and designers are expanding our understanding of what a treehouse is from a childhood fort, into a fully realized home or leisure space. This literature review will examine humans' relationship to nature and the built environment, where the two converge, and how that moment of convergence becomes its own unique in between space.

#### HUMAN RELATION TO NATURE THROUGH THE BUILT ENVIRONMENT

Humans have an intrinsic psychological need to connect with nature. Edward O. Wilson, a renowned biologist and the "father of biodiversity" (Wilson 2008) tells us that humans prefer shelter and workspaces that exist within proximity to water elements, open views of nature, and most importantly, to be looking down from a height onto their territory (Wilson 2008). "They want both a retreat in which to live and a prospect of fruitful terrain in which to forage, and in the prospect, they like distant, scattered large animals and trees with low, nearly horizontal branches. (Wilson 2008)" Even though most humans have evolved past their need for such primitive measures, all humans will instinctually seek out the environment from which our species evolved (Wilson 2008). At the same time, most are doing so unaware of their own biological and psychological process (Salingaros and Masden II 2008). Through time, these needs have evolved from an immersive connection to nature, to a more complex connection through spirituality and symbolism, to an even more complex mix with the rise of modern technology (Salingaros and Masden II 2008). One way to help us experience these many facets simultaneously is through the use of architecture, whereby the psychological need to incorporate nature is unfused into the design. Aside from the obvious and perhaps simple incorporation of plant life into our urban structures, it is particularly effective to directly insert the structure into the natural environment<sup>2</sup> (Salingaros and Masden II 2008). "Nature exhibits ecological complexity: interacting plants that in turn provide visual complexity, which is a source of neurological nourishment (Salingaros and Masden II 2008)".

<sup>&</sup>lt;sup>1</sup> This is also mentioned in Neuroscience, the Natural Environment, and Building Design by Nikos A. Salingaros and Kenneth G. Masden II where they state that humans "instinctively crave physical and biological connection to the world" and "Humans seeking shelter from the elements are compelled to construct buildings and cities." Though they are focused specifically on the concept of Biophilic Design, their main point of the article is that our human need to connect with our environment uses Biophilic Design as a reconnective methodology (Salingaros and Masden II). <sup>2</sup> Here the natural environment is defined as dense forest or open plain. The idea is to remove the architecture from its surrounding structures that provide its context and define its existence and place it in an environment wherein the context is changed completely and therefore its existence is defined by the nature around it.

#### Boundary Conditions

Architecture is a human creation. By creating a structure, we allow the lingering between two environments which therefore allows for observance and appreciation of the structure and space around it (Seamon 1993). In the case of treehouses, there is boundary created between the natural environment - the tree - and the built environment - the house - and the space created between these two environments "enables people to be together with nature by providing an intermediate site (Seamon 1993)". "The [treehouse] does not force one to make the unattractive choice between... the full intimacy of their home or... the distanced relation of the [outdoors]. Being [in a treehouse] carries no further obligations (Seamon 1993)<sup>3</sup>". The treehouse "opens a place for the occupant to belong to both nature and community... it is emphasizing the between and enabling gathering and lingering [within the space] to occur (Seamon 1993)."



<sup>&</sup>lt;sup>3</sup> The full, unedited quote reads: "The porch does not force one to make the unattractive choice between admitting people to the full intimacy of the home or of keeping them in the distanced relation of the formal public realm. Being on a porch carries no further obligations. (Seamon)" By changing the original context of the porch as a space between the public and private environments to the context of the treehouse as a space in between the natural and built environments we recreate the narrative so that it supports the idea that the treehouse is the center of its boundary conditions while the porch remains the center of its own.

#### WHEN THE TREE AS THE NATURAL AND THE HOUSE AS THE BUILT, CONVERGE

The treehouse is made up of two crucial ingredients: the tree and the house. The tree is Nature. Trees are the inevitable phenomena created as a product of earth, regardless of human interference (Ducarme and Couvet 2020). The tree exists figuratively and literally, it is representative of all forms of nature regardless of its form. This tree does not necessarily have to be a singular tree, as we will see later, it can also be an entire forest. Ultimately, the lens of the tree allows us to view nature as something complex with many unique facets (Ducarme and Couvet 2020). The second ingredient is the house. This house is considered architecture, a product of the built environment. It is constructed from gathered materials by humans to serve a purpose. This purpose can be as basic as shelter or as multi-purpose as work or leisure. In a treehouse, the structures can range from a simple tree platform to a modern family home, or to a permanent tribal dwelling, rising over one hundred feet above the forest floor, such as the ones the Korowai of Papua New Guinea (Stasch 2011). When these two concepts are combined, we find that "treehouses possess a transformative power: As soon as you climb through the threshold of a treehouse, you're a changed person. Being held by the trunk and branches of a tree, surrounded by the raw energy of nature, the soul is inevitably rejuvenated and the spirit lifted. (Nelson

2020)" At the same time, "the interior of such houses creates individual distinctive and spiritual space, which depicts mainly our inner path. With such space we can experiment boldly by letting this mysterious area to ascend to the surface. (Vacenovská 2020)"

#### BUILDING WITH AND IN TREES: PRECEDENTS

To truly understand the ways in which the structure of the treehouse comes into play within the scope of architecture, we must analyze how architecture has made use of the unique convergence of qualities that embody a treehouse. In this way, we see the direct instances of interaction between the natural and built environments that allow us that a moment of in-between.

Located in Madrid, Spain, Casa Levene is a family home that emphasizes being in proximity to nature without disturbing nature. Built with city regulations in mind, a unique structure was designed to intentionally allow an old pine forest to grow perpetually without the structure causing any hindrance or disturbance (Casa Levene 2009). The architects of NO MAD Studio used the existing trees to define the shape of the structure, the make their top priority the preservation of the surrounding trees. In this case, the architecture is the pinpoint of time and space, and the forest lives and breathes around it. The exterior finishes and geometric shape of the building call forth the feeling and vision of a climbing rock as opposed to the roof of a family house. While not a traditional treehouse, the use of the architecture as a connecting point to nature is undeniable. The proximity of the structure to the trees gives a cave-like feeling, allowing for an intense and deep connection with the surrounding forest.



#### BUILDING WITH AND IN TREES: PRECEDENTS

In Yaxkukul city in Yucatán [Mexico], "Life on the Tree" is a retreat designed at the exact same lot where the owner's old family house once was. It consists of a big open space where the remnants of the old house and the old "ramón" tree settle a dynamic brief (Life on the Tree House / LAAR 2021) The structure designed by LAAR Architects features a floating concrete slab and palm trees' straw coating. The contrast between the railings and the foliage of the tree, as well as the rectilinear structure of the built house compared to the organic forms of the tree trunk, are what defines this unique home as a treehouse.



#### ACCESSIBILITY AND LONGEVITY OF THE TREEHOUSE

Is the experience of treehouse architecture and its unique connection with nature limited to those with the physical capability of climbing a tree? The Treehouse Guys, a company based in Vermont, believe that the experience of a treehouse and its unique connection with nature can be made available to anyone, even those who cannot themselves climb a tree (The Treehouse Guys 2021). They incorporate ramps and wide-open platforms into their designs, as well as build with a focus on Universal Design principles such as Equitable Use, Size and Space for Approach and Use, and Flexibility in Use<sup>4</sup>. When it comes to bringing a treehouse to the masses, Pete Nelson, a master treehouse builder, describes his own experience building a treehouse in Kennett Square, Pennsylvania, and the reaction its visitors had: "People from all walks of life and all ages swarmed the treehouses... Watching the beaming faces of the first wave of visiting children, my heart nearly burst with joy: All of these people had come to experience these treehouses, which put them, whether consciously or not, directly in the arms of nature." (Nelson 2020)

<sup>4</sup>See: Universally Accessible Treehouses (https://thetreehouseguys.com/universally-accessible/)

#### ACCESSIBILITY AND LONGEVITY OF THE TREEHOUSE (continued)

Not only is the selection of wood and the actual construction of the treehouse vital to its success, but also the relationship of the house itself to its tree. This connection is essential to the continued growth and health of the tree. To understand this connection, we can analyze how treehouse structures are typically constructed. The traditional treehouse is a wooden structure (Vacenovská 2020), with the general practice that old growth hardwood trees are the ideal material (Nelson 2020). The characteristics of wood, such as moisture regain, change in dimensions and susceptibility to damage, makes it necessary to design and construct the wooden elements based on practices that help increase the lifetime of the wooden product. The usage of wood as a natural material in architecture and interiors positively influences microclimate of the building and living comfort (Vacenovská 2020). Too many connections and nails create weak connections and can stress the tree while it heals multiple wounds. By using larger and fewer fasteners and limiting penetrations into the tree, you create a stronger structure overall (Nelson 2020).

#### CONCLUSION

As you ascend the branches of the tree, you are also ascending to a higher understanding and deeper appreciation of nature. When we construct our structures, we are then creating physically a model of our current selves and ideals within a fixed location and shape. By combining the built structures of architecture with the organic and wild forms of nature, a new space is created in the in between: a place for lingering between humanity's past, present, and future and a place for the fulfillment of the subconscious desire to connect with nature. The location and construction of the treehouse is entirely between the architect and their trees, making the experience of the treehouse universal and yet unique in every instance.

#### BIBLIOGRAPHY

Casa Levene. 2009. 1 November 2021. <a href="https://archello.com/project/casa-levene">https://archello.com/project/casa-levene</a>>.

Ducarme, F. and D. Palgrave Commun 6, 14 (2020). https://doi.org/10.1057/s41599-020-0390-y Couvet. "What Does 'Nature' Mean?" Humanities and Social Sciences Communications 6.14 (2020).

Evawani, Ellisa and Andriani Gita. "THE ROUTE AND JOURNEY OF TREE HOUSES." Proceeding I-Dwell – International Conference on Dwelling. Depok, West Java, Indonesia: Department of Architecture, Universitas Indonesia, 2015. 136-141.

Life on the Tree House / LAAR. 17 May 2021. 1 November 2021. <a href="https://www.archdaily.com/961700/life-on-the-tree-house-laar-">https://www.archdaily.com/961700/life-on-the-tree-house-laar-</a>.

McKinney, Courtney. "Treehouses: Civilizing the Wildness of Men and Nature." English Undergraduate Distinction Projects. Dallas, Texas: Southern Methodist University, 19 May 2018. 58.

Meyers, Helena. "Rooted In History: The Architecture of Tree Houses." 17 November 2016.

Nelson, Pete. New Treehouses of the World. Abrams, 2020.

Salingaros, Nikos A and Kenneth G Masden II. "Neuroscience, the Natural Environment, and Building Design." Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life. Ed. Stephen R Kellert, Judith H Heerwagen and Martin L Mador. Hoboken: John Wiley & Sons, Inc, 2008. 59–84.

Seamon, David. "Toward an Architectural Vocabulary: The Porch as a Between." Mugerauer, Robert. Dwelling, Seeing, and Designing: Toward A Phenomenal Ecology. Ed. David Seamon. Albany: State University of New York Press, 1993. 103-129.

Stasch, Rupert. "Korowai Treehouses and the Everyday Representation of Time, Belonging, and Death." The Asia Pacific Journal of Anthropology 12.4 (2011): 327-347.

The Treehouse Guys, LLC. Custom Tree Houses. n.d. < https://thetreehouseguys.com/>.

Vacenovská, V. "The Treehouses." IOP Conference Series. IOP Publishing, 2020. 1-7.

Wilson, Edward O. "The Nature of Human Nature." Biophilic Design: The Theory, Science, and Practice of Bringing Building to Life. Ed. Stephen R Kellert, Judith H Heerwagen and Martin L Mador. Hoboken: John Whiley & Sons, Inc., 2008. 21-26.

# **Topic Presentation**



# Threshold: The Transition Point Between the Natural and the Built Environment

Abigail Donahue - Thesis Topic Presentation 2021

### Main Questions

- □ What defines Urban/Rural environments? Are these environments created or do they occur as a side effect? How does the addition and subtraction of Nature change these definitions?
- How do humans interact with the natural environment? How has this interaction changed over time? Why do humans interact differently with different natural environments?
- How can the transition between the natural and built environment be broken down into identifiable subcomponents? What defines these subcomponents and how are they interacted with or created?

#### Mapping the Environment: Define Each Part - Can these be broken down further?



https://blogs.worldbank.org/sustainablecities/how-do-we-define-cities-towns-and-rural-areas

#### Sub Topics by Category (evolving)

Rural

#### Agriculture

The Natural Environment

Sub Rural

Population Density

The Human to Tree Ratio

#### Sub Urban

Suburbs

Landscape Design

#### Urban

Urbanism

The Built Environment



#### Additional:

Biophilic Design

Communities in Natural Disaster Locations

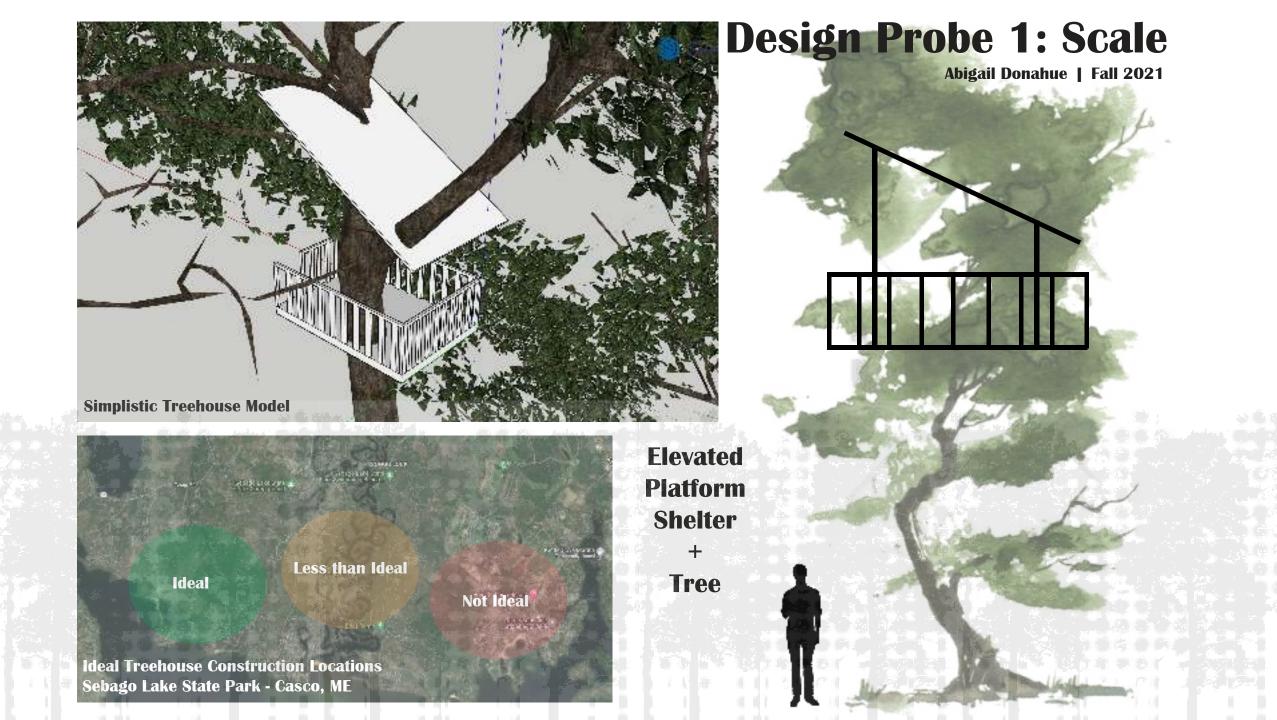
https://frameweb.com/article/post-pandemic-urbanism-why-we-should-promote-parkland-over-parking

## **Final Question**

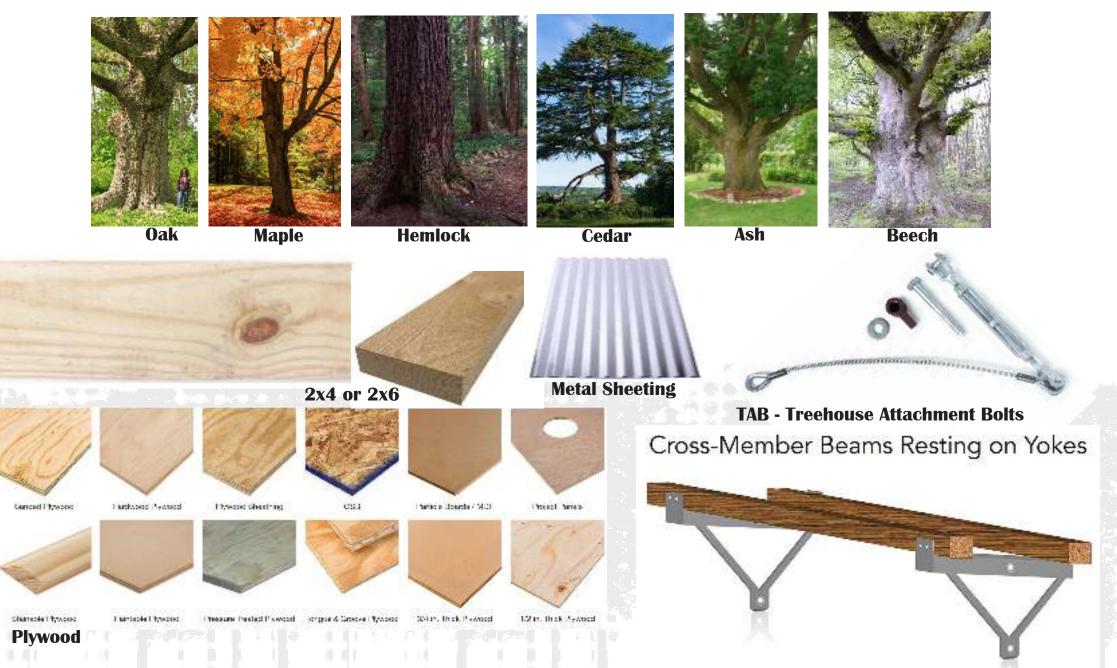
How can this threshold be used in small or large scale to improve each type of environment? What steps could be taken to use this threshold to aid global environmental and sustainability efforts?

# Design Probes





## **Design Probe 2 - Materials**Abigail Donahue Thesis Fall 2021



# **Design Probe 3**

#### $\bullet \bullet \bullet$

Abigail Donahue | Thesis | Winter 2022

# Who is impacted by treehouse architecture?

The designer/builder of the treehouse

The end user of the treehouse

The tree/forest/landscape that the treehouse is built in

The wildlife that lives around the treehouse



#### Experience Documentation: Caroline Morse Teel in the Tinyeleti Treehouse, Lion Sands Game Reserve, South Africa

"It would be just me, my boyfriend, and the wildlife until our guide returned after sunrise to pick us up for our next game drive."

"The view, uninterrupted for miles, is of the Sabie River, which draws many animals to its shores. You can relax on your deck and watch the parade. I switched on the provided strong flashlight after dark, and was shocked when it illuminated a hippo and her baby wandering just outside of our room for the night."

"Once night falls, the sky lights up with stars. And because there's no light pollution, you'll be able to spot all kinds of bright constellations. Birds, frogs, and other insects all make their nightly noises, which—combined with the rushing of the river—makes a great soundtrack to fall asleep to."

https://www.smartertravel.com/what-its-really-like-to-sleep-in-a-treehouse-hotel/



# Experience Response: Designing Around the Nature that Surrounds You

Let's say I start with these hemlock trees

We build the treehouse platform high using multiple trees as supports, with a retractable ladder

We build strong walls with a slanted roof, and small windows

We use treated wood siding and flooring on both the interior and exterior

Outhouse structure on ground level

So now we have our treehouse, what goes inside?

Fireplace/Woodstove, Water Reservoir, Couch or chairs, Books, cards, board games, Gas lanterns

How would this treehouse be different in a different tree?



## Design Brief: Concept, Research, Precedent Analysis, and Program Development



# Treehouse Between People and Nature

Addressing Tourism, Culture, and Nature in Maine

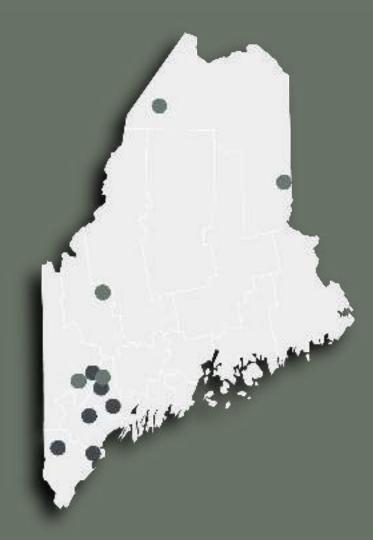
Abigail Donahue | Thesis | Winter 2022 Advisor: Nicole Koltick

# Concept

Abigail Donahue | Thesis | Winter 2022

## Inspiration

- Urban-to-Rural Transition of the Built Environment - The Threshold
- Abundance of flora and fauna in Maine compared to that of other states
- Difference between small rural communities that I was raised in and the expansive metropolitan communities I've visited

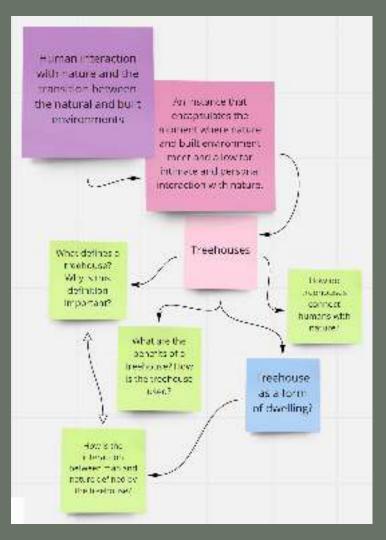


## **Initial Questions**

- □ What defines Urban/Rural environments? Are these environments created or do they occur as a side effect? How does the addition and subtraction of Nature change these definitions?
- □ How do humans interact with the natural environment? How has this interaction changed over time? Why do humans interact differently with different natural environments?
- □ How can the transition between the natural and built environment be broken down into identifiable subcomponents? What defines these subcomponents and how are they interacted with or created?
- How can this threshold be used in small or large scale to improve each type of environment? What steps could be taken to use this threshold to aid global environmental and sustainability efforts?

### From Threshold to Treehouses

- Analyzing the concept of the treehouse as a model of human interaction with nature.
- The architecture of the treehouse represents the built environment, while the tree, trees, or landscape surrounding the treehouse represents the natural environment.
- Theory: Treehouse architecture enhances the experience of nature.



"Treehouses possess a transformative power: As soon as you climb through the threshold of a treehouse, you're a changed person. Being held by the trunk and branches of a tree, surrounded by the raw energy of nature, the soul is inevitably rejuvenated and the spirit lifted."

Pete Nelson, New Treehouses of the World

"Treehouses are a way to break down the feeling of separation that exists between humans and nature."

Takashi Kobayashi, Treehouse People

## **Revised Questions**

- □ What is the experience of the treehouse?
- □ How does the structure of the treehouse symbolize and emphasise people's connection with the natural environment?
- □ How can the experience of the treehouse be used in different architectural contexts?
- □ What can the experience of the treehouse bring awareness to sustainability and global conservation efforts?

# **Precedents Analysis**

 $\mathbf{O}$ 

Abigail Donahue | Thesis | Winter 2022

#### Casa Levene

NO.MAD Studio

Madrid, Spain

Completed 2006

"Original plans had to be adapted to the urbanistic requirements of the council of San Lorenzo de El Escorial, it's hometown. Casa Levene is located at the outskirts of the village, in Monte Abranto, surrounded by an ancient pine tree forest. The architect perfectly resolved the challenge of a functional family house, integrated with the environment. Shaped by the pine forest, it offers a wide view on the natural surroundings from every room, including the swimming pool." -Archello

https://archello.com/project/casa-levene









#### Life on the Tree House

#### LAAR Architects

Built 2019

Mexico

"Life on the Tree" is envisaged as a young girl's dreams manifesto whose childhood was spent climbing trees and branches in an old masonry house. Years went by and the context changed, yet the trees and stone walls of those times still remain as witnesses of time, now standing as the main characters and accomplices of that dream." -Archdaily

https://www.archdaily.com/961700/life-on-the-tr ee-house-laar?ad\_source=search&ad\_medium=s earch\_result\_projects









#### Kusukusu

Takashi Kobayashi and NAP Architects

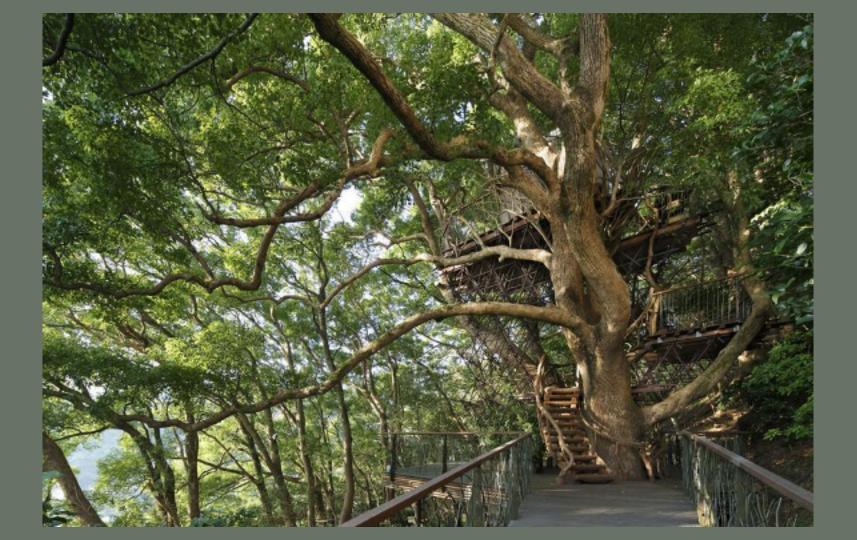
Risonare Resort, Atami, Japan

Completed 2014

"Kusukusu (it borrows its name from kusu-no-ki, Japanese for camphor tree) is a marvelous feat of architecture, engineering and technology. The team came in and 3D-scanned hundreds of points on the tree. Based on that 3D data they then created a steel trellis that threaded through the tree, interlocking perfectly and acting as an architecturally weight-bearing yet visually stunning support system. What's amazing is that the treehouse in its entirety, never touches the tree. It's completely self-standing so as to not harm the tree." -Spoon and Tamago

https://www.spoon-tamago.com/2015/07/23/japans-la rgest-treehouse-is-a-sprawling-structure-built-around -a-300-year-old-tree/







#### Treehotel

Multiple Architects - Each treeroom is a unique creation by Scandinavia's leading architects.

Harads, Sweden

#### Founded 2004

"Why not create a hotel that gives people a chance to experience nature amongst the treetops, while also providing a uniquely designed housing experience? These questions led to the creation of Treehotel in Harads – a place where nature, ecological values, comfort and modern design are combined for an exciting adventure. Treehotel was inspired by the film "The Tree Lover" by Jonas Selberg Augustsen. It's a tale of three men from the city who want to go back to their roots by building a treehouse together. "The Tree Lover" is a philosophic story about the significance of trees for us human beings. The idea behind Treehotel is to offer high-standard accommodation in a harmonious place where daily stress melts away. Guests can relax and renew their energy while surrounded by unspoiled nature." -Treehotel



https://treehotel.se/en





# Research

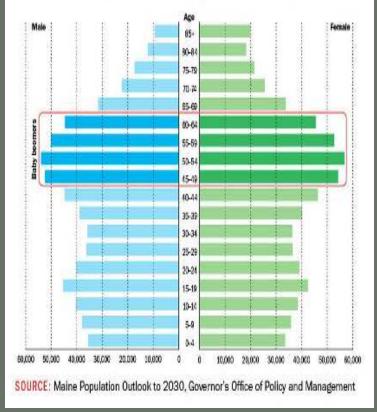
Abigail Donahue | Thesis | Winter 2022

#### Demographics

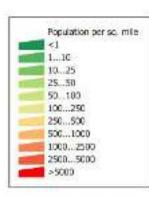
- Maine considered "oldest-in-the-nation"
- A fifth of the population is older than 65
- Maine has 411,540 people between the ages of 45 and 65, but only 301,124 people between age 20 and 39
- Since 1975 the peak year for school enrollment in Maine – the number of children in school has fallen from 253,000 to 186,000, a decline of 26 percent
- In 2011, for the first time in at least 70 years, more people died in Maine than were born here

#### MAINE POPULATION PYRAMID, 2010

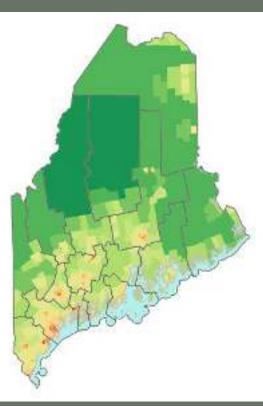
2010 data shows the Maine's boomers moving into their retirement years



## Demographics



Source: U.S. Census Bureau Census 2000 Summary File 1 population by census tracts.



	Population per so, mile
	110
-	1025
	2550
	50100
	100250
	250500
	5001000
	10002500
	25005000
	>5000
-	

Source: U.S. Gensus Bureau Gensus 2010 Summary File 1 population by census tract

## What's so good about Maine?

- Vacationland The Way Life Should Be
- Outlet Malls in Freeport and North Conway, NH
- Maine has 3,478 miles of coastline
- 17 million acres of forestland 89.1% of the land area in the State
- 90% of the country's lobster and blueberry supply comes from Maine
- 155 active, licensed craft breweries in operation and 24 wineries
- Eastport, Maine is the first place in the country to see the sun
- Maine has many Haunted Inns and Lighthouses (and regular ones)
- Acadia National Park, one of the most visited U.S. National Parks, with over 2 million annual visitors
- 25 ski areas and 1 desert
- 2nd Best state to live in Thrillist
- Maine Maple Sunday



## What is Missing from Maine?

• People

## • <u>Diversity</u>

- Attractions
- Contemporary Hospitality
- Metropolitan Convenience
- Entrepreneurs and Opportunities
- Walkability



#### Live + Work in Maine

Live and Work in Maine is a not-for-profit initiative designed to increase awareness about the great career opportunities that exist in Maine, and promote the world-class quality of life Mainers enjoy. Our mission is to show the world that in Maine, you can have it all when it comes to quality of life AND quality of career.

We partner with employers, communities, nonprofits and individuals to develop and execute programming, events, marketing campaigns, and/or other initiatives to support the Maine employment brand, raise awareness of Maine as a career destination, and ultimately attract and retain the talented individuals Maine employers need to continue thriving into the future.

The data has been clear: **Maine is facing a demographic challenge** – our population is getting older, and we need a strong workforce to ensure employers continue to thrive into the future.



#### **Current Questions**

- □ What is the experience of the treehouse? How do we use treehouse architecture to enhance the experience of Maine and/or the other way around?
- □ How do we make this experience luxurious but mindful of affordability and materiality?
- □ How can we pair architecture and site together to enhance people's connection with nature as a whole?
- □ How can we rethink the relationship between tourism and local economy? How does addressing tourism and specificity of place help Live + Work in Maine? Can tourism and cultural preservation be handled in a culturally sensitive way?

# **Program & Site**

Abigail Donahue | Thesis | Winter 2022

#### **Construction Considerations & Maine Made Materials**





Textiles, Soft Goods

Furniture, Artwork, Decor, Complimentary Necessities

Timber, Windows, Construction Materials

Casegoods, Wood Stoves (Heating)

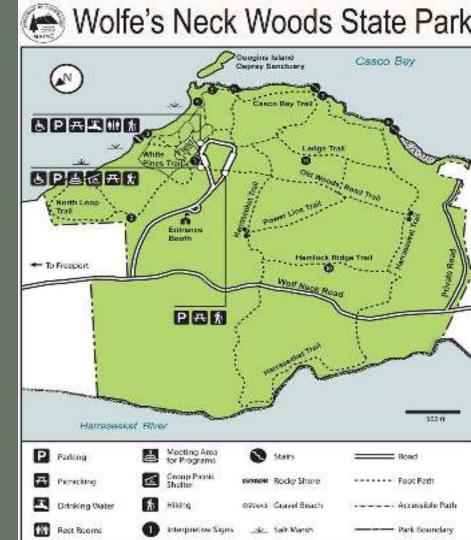


- Tree Inventory and Mapping Software
  - ArborPro
  - American Tree Farm System
  - Rainbow Tree Care
- Tree health
  - Sturdy, has reached peak growth
  - TAB or Treehouse Attachment Bolt
  - Support brackets, posts, and beams where necessary
- The Goal: Avoid damaging, hindering growth, or removal of trees where possible

## Site: Wolfe's Neck Woods State Park, Freeport, ME

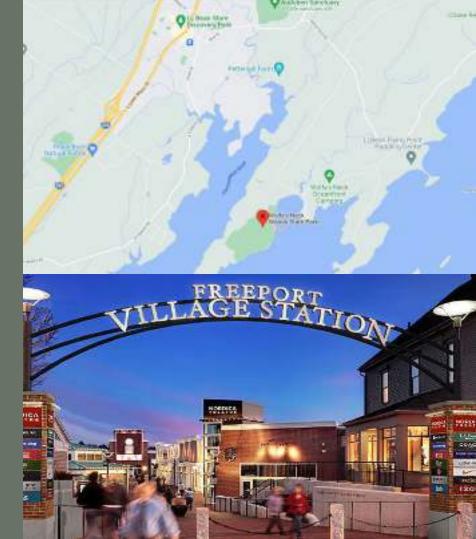
- **5-min drive** from the center of Freeport's shopping district
- "As visitors approach the park, marshes and open fields provide a tranquil transformation back to nature."
- More than 200 acres was given to the State by Mr. and Mrs. Lawrence M.C. Smith of Freeport in 1969
- Contains varied ecosystems, including **white pine and hemlock forests**, a salt marsh estuary, and the rocky shorelines on Casco Bay and the Harraseeket River.
- Signature residents are the ospreys who nest on nearby Googins Island

https://visitmaine.com/things-to-do/parks-natural-attractions/wolfes-neckwoods-state-park



## Site: Freeport, ME

- Highway access to Interstate 295
- 30 mins to Portland, ME
- 20 mins to Auburn, ME
- Nearby to Bradbury Mountain State Park
- Downtown featuring a taste of maine charm with a bonus Outlet Park featuring designer brands and local small businesses
- Proximity to outdoor activities such as hiking, biking, skiing, kayaking and paddling, swimming, fishing, farms, and more



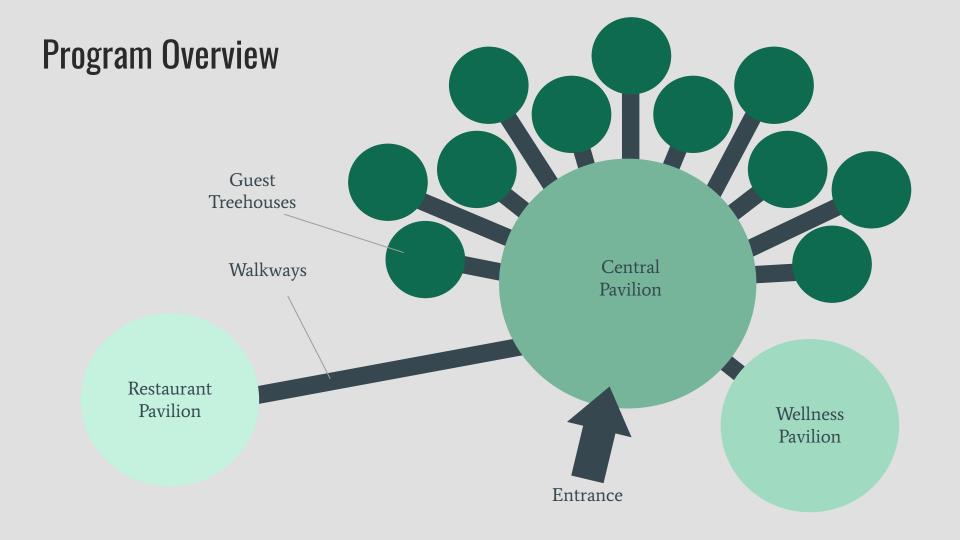
### **Program: Treehouse Capsule Hotel**

#### <u>Goals:</u>

- Assist Live + Work in Maine initiative by supporting the state tourism industry and bringing attention to the state's small businesses and rural towns
- Educate visitors about Maine's natural flora, fauna, and historical sites through access to the state park service, trails, beaches, and events
- **Encourage connection with nature** by providing a space for relaxation and rejuvenation far away from the hustle and bustle of urban society

#### Requirements:

- 1 dozen private treehouse capsules with a mix of studio, 1 bedroom, and 2 bedrooms
- 1 central pavilion including a large flex space for events and education, a check in/out space, a main office, and housekeeping.
- 1 restaurant pavilion with a bar and seating accommodations for guests and visitors to the park. Must also include a commercial kitchen and have easy access to the road
- 1 wellness pavilion including a sauna, hot tub, and spa services
- Covered walkways between each pavilion and connecting the capsules to the central pavilion

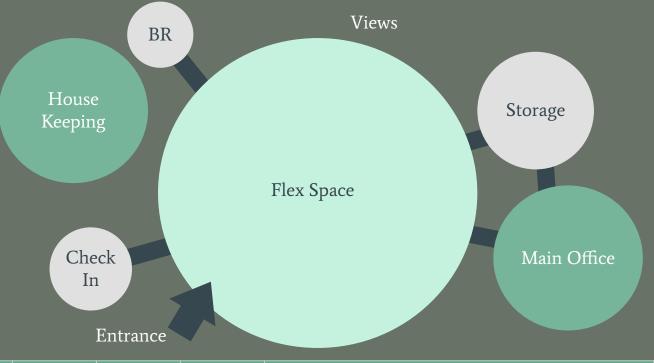


#### Proximity Matrix

Space Proximity Chart	Studio	1 Br	2 Br	Flex Space	Check in	Office	нк	Spa	нт	Sauna	Bar	Dining	Kitche n
Studio Treehouse													
1 Br Treehouse													
2 Br Treehouse													
Flex Space													
Check In													
Main Office													
Housekeeping													
Spa													
Hot Tub													
Sauna													
Bar													
Dining Room													
Kitchen													

## **Central Pavilion**

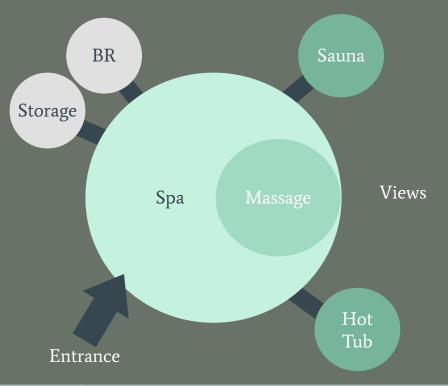
- Wellness and Education Events
- Main entrance to the hotel
- Access from here to park trails and amenities



Space	Estimated Square Footage	Electricity	Plumbing	Heating	Proximity to Ground	Additional Requirements
Flex Space	4000	Y		Y	GL	Storage for simple decorations, tables and chairs, ADA Bathroom
Check In	50	Υ		Y	GL	Host Stand, Ipad Station?, Key Storage?, Concierge
Main Office	200	Y		Y	GL	Printer, Computer, Lateral Storage File, 60LSF Shelving
Housekeeping	500	Lighting, Appliances	Y	Y	GL	Mop Sink, Industrial Washer/Dryer Hookup, Linen Storage, Chemical Storage

### Wellness Pavilion

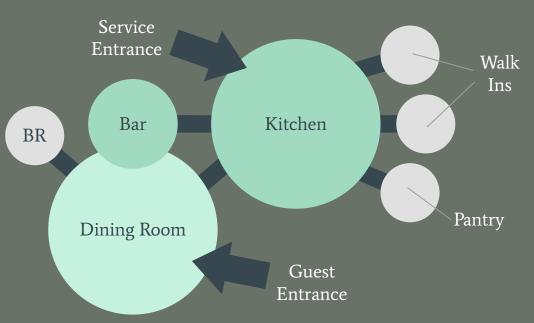
- Offers spa services as well as Maine made products to sell
- Open air and views of water
- Promotes relaxation, rejuvenation, and a more luxurious approach to interacting with nature



Space	Estimated Square Footage	Electricity	Plumbing	Heating		Additional Requirements
Spa	1000	Y	Y	Y	GL	Room for Massage, Hand Wash Station, 2 Showers, Shelving VIEWS OF BAY, Storage, ADA Bathroom, Attendant Station
Hot Tub	100	Y	Y		GL	Room for 6 persons, Towel Racks/Hooks, Shoe Storage
Sauna	500		Y	Y	GL	Room for 12 Persons, Bench seating,

## **Restaurant Pavilion**

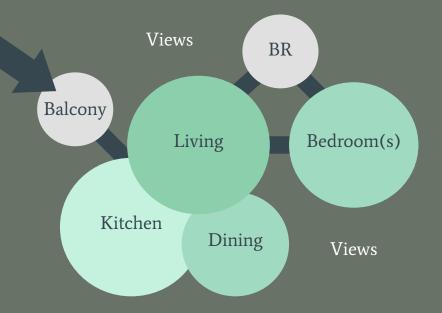
- Serves Farm-to-Table dishes with additional classic Maine staples
- Bar featuring local craft brews and wines
- Located close to the main roads for ease of access



stimated quare ootage	Electricity	Plumbing	Heating		Additional Requirements
1000	Y	Y	Y		Room for 10 barstools, min. 60LSF of shelving, min. 2 low boys, Hand Wash sink, min. 120LSF counter space, Space for tap
2000	Y		Y	GL, 1S, 2S	Total seating for 24-30 guests, Host station, ADA Compliant Bathroom
1500	v	v	V		Sanitation Station, Dishwashing Station, 360LSF Shelving for Dish and Pan Storage, Commercial Stove with Vent Hood, Prep Station With Sink, Serving Station, Walk in Fridge, Walk in Freezer, 60SF Pantry Space, 3 Handwash Stations
	otage 1000 2000		otage 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	uare otageElectricityPlumbingHeating1000YYY2000YYY	uare otageElectricityPlumbingHeating to Ground1000YYYGL2000YYGL, 1S, 2S

#### Treehouses

- Accessed by walkways from Central Pavilion
- Range of guest accommodations for accessibility and affordability
- Maine made interior finishes and decor
- Design focused on providing a comfortable and relaxed interior while highlighting the natural beauty and sight of the exterior and environment



Space	Estimated Square Footage	Electricity	Plumbing	Heating	Proximity to Ground	Additional Requirements
Studio Treehouse	500	Y	Y	Y	GL, 1S,	1 Queen Bed, Dresser, Kitchenette, Bathroom w/ Shower, Covered Balcony, Closet, Sofa, Media Stand/Bookshelf
1 Br Treehouse	750	Y	Y	Y	1S, 2S	2 Queen Bed, Dresser, Kitchenette, Bathroom w/ Shower, Covered Balcony, Closet, Sofa, Media Stand/Bookshelf, Dining Table for 2-4
2 Br Treehouse	1000	Y	Y	Y	1S, 2S	1 King Bed, 2 Queen Bed, 3 Dresser, Kitchenette, Bathroom w/ Shower, Covered Balcony, 2 Closets, Sofa, 2 lounge chairs, Media Stand/Bookshelf, Dining Table for 4-6

Entrance

#### Walkways

- Semi-sheltered travel between pavilions and treehouses
- Inspired by existing State Park trails and pathways
- Allows for direct interaction with nature year round while providing easy travel around the site
- Raised to allow tree roots and ground cover foliage to remain undisturbed
- Use of ramps rather than steps, or combinations, wherever possible



Space	Estimated Square Footage	Electricity	Plumbing	Heating		Additional Requirements
Walkways	TBD	Y	N	Y	GL	Covered, Open Air, Heat lamps for warmth in winter, railings

## Summary: Treehouse Between People and Nature

#### <u>Goals:</u>

- Assist Live + Work in Maine initiative by supporting the state tourism industry and bringing attention to the state's small businesses and rural towns.
- Educate visitors about Maine's natural flora, fauna, and historical sites through access to the state park service, trails, beaches, and events.
- **Encourage connection with nature** by providing a space for relaxation and rejuvenation far away from the hustle and bustle of urban society.
- **Use treehouse architecture** to convey concept and fulfill program requirements.

#### **Program Requirements:**

- 1 dozen private treehouse capsules with a mix of studio, 1 bedroom, and 2 bedrooms
- 1 central pavilion including a large flex space for events and education, a check in/out space, a main office, and housekeeping.
- 1 restaurant pavilion with a bar and seating accommodations for guests and visitors to the park. Must also include a commercial kitchen and have easy access to the road
- 1 wellness pavilion including a sauna, hot tub, and spa services
- Sheltered walkways between each pavilion and connecting the capsules to the central pavilion

## CASE STUDY: The Woods Maine Treehouse Norway, ME Interview with Sam Masanby, Owner

#### Case Study Images



#### Case Study Interview (Transcribed)

Sam Masanby 0:26 So tell me a little bit about what you're working on.

Abigail Donahue 0:28

Awesome. So my thesis project is called tree house between people in nature. And I am using the nature in Maine specifically, and tree house architecture as a way to connect people with nature, analyze how people interact with nature. And we've decided to move forward with that by designing a treehouse themed capsule hotel.

Sam Masanby 1:00 Okay.

Abigail Donahue 1:02

And we chose Freeport actually, for the site for that. And so right now, we're still just getting into the schematics. We're just starting to design what its gonna look like. But the lot of the project is about addressing tourism in the state and how the live and work in Maine initiative is working. And how can we bring more people to the state and bring more appreciation for nature with that?

Sam Masanby 1:36 Very cool.

Abigail Donahue 1:38

So I have a list of questions, I could start at the beginning and run through. Would you mind just running me through a, like, what does a typical guest experience when they come to your hotel, usually?

#### Sam Masanby 1:58

So before like, so we try to have a really unique guest experience before they even arrive. So we've partnered with Vanessa, an expert in all things Maine, she has her own concierge service in your name, and she can help do itinerary planning for guests and etc. and things like that. So when someone comes and stays with us, or someone books with us, I should say, shortly, few hours after they book, one of the first things I do is I introduce them to Vanessa. And if their stay is further out, Vanessa will reach out closer tthere say or if it's, you know, sooner than shows scheduled call with them. And basically what she does she like a 15-20 minute call, she just finds out, Hey, what is it that you'd like to do? What are you interested in? Do you like outdoor activities? Do you like dining, and she helps create a custom itinerary for them. That's as part of the state we've included that as part of this day when someone stays with us. And it's really nice, because they feel like they're not just coming here, and then don't know what to do or what to experience or what hikes to go on, or what mountains to look at, you know, go and I gone worse what ski places. So it's really nice. She's got a lot of connections, so she can really customize that itinerary according to their needs. So that's like one of the first guest experiences before they even arrived. So there's that. Shortly before they arrived, I personally reach out to every guest mostly via text message to give them my cell phone number, give them my local recommendations, let them know. You know, sometimes, you know, they're huge fans of Treehouse masters, or whatever it is, was just a matter of like chatting greeting them. One of the other things we do is the amenities when they arrive. So prior their arrival, and there and then upon arrival, I actually greet them. So I greet every guest give them a rundown answer any questions that they may have. And you know, sometimes, you know, they're huge fans of Treehouse masters, or whatever it is, was just a matt

#### Abigail Donahue 4:51

Yes, yes, it does. That's really that's really unique. I've never heard of a place that customizes the experience in that way. Why Norway specifically, why Maine? Did the environment or the community shape your decision to build a tree house?

#### Sam Masanby 5:37

It was a huge factor, so when we we first visited Norway about seven or eight years ago, friend introduced us to the town when we came and visited and fell in love with the town and then eventually found a property up here. But the actual final move to specific Norway for my family was during the build of the treehouse project, we fell in love with all of our excavators, our electricians, the people that worked on this, and I couldn't imagine they became my friends. And I couldn't imagine being anywhere else. And then the community was supportive. And when we started the brand piece of the business, which is The Woods Maine brand, we just opened up a retail shop in downtown Norway. We really wanted to ingratiate ourselves into the community and be a part of the community and really utilize our platform to say, hey, we can actually bring traffic to town that's never heard of Norway, because we have a really great reach now because we have this like tree house and this brand. And so we decided last summer to open up a store and the community has been incredibly supportive. And it's just amazing. Because I could call you know, 30 people and everybody would be there from him. That's very, very unique.

#### Abigail Donahue 6:48

Yes, I love one of my favorite things about Maine is actually how close everyone is. It's funny, I actually heard about you guys, because my sister works for anchor, the marketing team. Her name is Kristina, I don't know if you interacted with her. Yeah, but she actually when I was telling her about my project, she actually gave me your Instagram.

### Sam Masanby 7:15

Oh, that's awesome. That's awesome. Yeah, no, I love working with anchor that was the first place we first people we called

### Abigail Donahue 7:24

Oh awesome. So my next question was why tree house? We're not just like a cabin in the woods or a tiny house. Were there any special considerations that you took when designing the tree house?

### Sam Masanby 7:38

When we designed the tree house. So we first were trying to determine if we were going to build on the land. And so we had an architect out we were talking to him. And it just nothing really quite felt right. And my husband and I had always talked about building a treehouse with Pete Nelson, we never really thought it would come to fruition. But we always talked about it. We used to watch the show. And then when we started getting in, like what costs be involved in building a home, we're like, let's reach out to Pete and see if he's interested in our idea. And we immediately heard back a couple weeks later on the phone a few weeks after that he flew out. And then it was on from there. So

### Abigail Donahue 8:13

Awesome. Love that. It sounds like it happened really quickly. Cool. Was there anything unexpected that happened during the construction? Have you since the tree house has been built and open to the public? Have you been surprised by anything?

#### Sam Masanby 8:33 about the actual build, or?

Abigail Donahue 8:36 both about the build or about like the customers?

Sam Masanby 8:40

It was challenging to keep it as private because we live on a private property. So we don't publish the address I actually geotag to 5000 miles away from where it is. So I did that on purpose because it's our private residence, we want to make it feel exclusive to guests. In terms of surprising, you know, you're working in untouched land. So you know you you're basically invading the animal space. So getting to know all the creatures that live in the area. That was new, keeping them out that was interesting. In terms of surprise, otherwise. The surprising part is that I didn't think that a brand would be built out of the Treehouse, and actually the treehouse becomes the secondary business and the retail and online is the primary, which has been very surprising to me.

Abigail Donahue 9:28 Yeah, I can imagine. It sounds like you guys went into this idea of having the tree house as the focus and then all of a sudden you have this whole business that surrounds it.

Sam Masanby 9:40 Yes.

Abigail Donahue 9:42 I noticed you have a lot of like high end features and services. Why high end versus regular low end? Were there any like material specifications-

Sam Masanby 9:52

Completely deliberate. We knew more and more places would come up and we never wanted to fall in the middle. So we wanted to pick a lane and commit to So we decided to kind of go on the higher end side. So that was one of it. We didn't want to kind of fall in the middle when we created something like this. The other piece of it too is there's a completely underserved market for accommodations for people that have a certain particular level of accommodations that they enjoy in western Maine. So it gives the opportunity for those that want to have higher end accommodations to have that and explore a different part of Maine where they may not otherwise find the accommodations that they're used to. Let's say that's easier to find along the coast.

Abigail Donahue 10:33 I see. Yeah, I totally get that. I think the only other anything that could be considered high end would probably be close to the casino, right?

Sam Masanby 10:42 Yes.

### Abigail Donahue 10:44

Yeah, I haven't been, I've only ever driven through. I've never stopped anywhere. I'm from the Auburn. My dad's my dad lives in Buckfield, but I've mostly lived closer to the coast myself. Um, let's see. What would you who would you say is your largest demographic customer and is that different from the original target demographic?

#### Sam Masanby 11:27

I don't think so. I think that's pretty spot on with our demographic. I mean, obviously, higher disposable income. You know, like I had said like somebody that is looking for a luxury getaway. Something that's like all encompassing. We have the full chef's kitchen, all of that. So someone that wants to be in nature, but doesn't cooperate but wants it above the step of glamping you know what I mean? The amenities Yeah.

#### Abigail Donahue 12:04

Let's see... What spaces are required outside of the treehouse to run this facility are there like what are the did you run me through like the logistics? How do you handle trash? How do you clean between customers? Is there a recycling just like the nitty gritty stuff?

#### Sam Masanby 12:23

We have in there we have recycling regular trash guests can text us we can come up pick up the trash and we take it away from them. We don't put a trash cans or anything like that down there. And in terms of operations, I have a great turnover crew that goes in and takes care of everything. They're impeccable. From a turnover perspective, in terms of operational like the treehouse the treehouse is on its own septic its own well, its own add has its own backup generator. So if the power goes out, guests don't even experience that it just automatically kicks on and they don't think anything. So it's completely independent that way. But my husband and I basically run all the operations it snows we're up there plowing, shoveling that whole thing.

### Abigail Donahue 13:07

Gotcha. That sounds like a lot of work. Let's see. I have another question. This one actually came from my thesis advisor. If money were no object, what would this facility be like?

### Sam Masanby 13:25

Well, that is like phase 2, 3, 4 For us. We will probably in 2023, building out the exterior landscaping firepit area, making it very natural. And there we at some point for most of put a bridge that's impulse of it's actually a full size board game, you can open up over here, if you want, it's really cool, they actually break the board down so it folds up and come back. But it actually is full size to really cool. So, you know, eventually, you know, we're having let's say like a suspension bridge to another, you know, meditation tier or something like that. If insurance was no issue, we probably put it out. But really our next phase is actually building out the infrastructure down at the lake. So we do have like 100 feet of lakefront that guests can enjoy walking down on private property. And we have a doc there. So we want to improve that area down there. So we have a lot of different things that are being phased in tiered for the actual property itself.

### Abigail Donahue 14:28

Awesome. It looks like you guys have a lot of like big plans for the future as the brand grows.

### Sam Masanby 14:34 For the brands is outside of the merchandising side. Absolutely. We have some incredible collaborations coming out this year, some on top already for next year. Yeah, we're getting there.

Abigail Donahue 14:45 All right. And I think you kind of already answered this question, but I'm gonna ask it anyways. Would you build another tree house again?

Sam Masanby 14:59

Um, They have to be under different circumstances we will not be building directly on the property that's existing. We would potentially consider it but there have to be that everything would have to be right for that to to occur,

Abigail Donahue 15:17 the stars would have to align.

Sam Masanby 15:19

Yeah. Because I just, it's just my husband and I and we juggle the online business, the retail business and the hospitality side. So I'm pretty maxed out and we have a four year old, so I'm pretty maxed out. So expansion on the hospitality side is not right now where our focus is. Working on the retail side of the brand side is probably where we're at.

Abigail Donahue 15:41

Gotcha. Tell me a little bit more about you said you guys provide like pancake mix in that you have a commercial kitchen. Do you mind telling me a little bit more about like the food services you offer?

### Sam Masanby 15:53

So we actually don't do any first foods purposes to take the place of being like a b&b we actually source local pancake mix from a farm here resource locals here for we also incorporate providing a local chocolate company does our writer Coast chocolate, we have a custom tea blend, we deal with a tea maker around here that we provide guests with our special on with main tea blend. We also sourced black woman business for all of our bath products in there. In terms of like additional foodservice, oh, we do Time and Tide coffee, which is a company out of Biddeford that will provide some coffee for the guests and like smaller packages, so we really try to stop the treehouse with small businesses, for them to experience new things that you know, to a customer base that otherwise wouldn't be exposed to.

### Abigail Donahue 16:45

Excellent. That was actually something that I was pushing for in my own thesis project. We started doing research. There is a made in Maine, best of America website. And I've been grabbing everything from that website that I can. Yeah. I saw on your website there, it said that you guys had, I think an interior designer guy who helped you guys furnish the interior.

### Unknown Speaker 17:15

So I worked very closely with Christina Salway. So she and I started with June. Typically she comes in the last 30 days of the project and does her thing. I started engaging with her prior to the building even, you know, the first initial sketches. There was a lot of elements I wanted in the treehouse and I wanted to make sure they were incorporated. So she and I actually collaborated on the interior design elements throughout the project.

Abigail Donahue 17:37 Awesome. I love that. Did you focus on any specific brands,

#### Sam Masanby 17:42

Not so much specific brands, but just the vibe, we wanted to have it. A lot of the navies that are in there are a nod to the lake. So even though you were up in the trees and you felt like you were in the mountains and the trees, we want to remind you that you're also tagged to the lake with some of the elements of the flood imagery is

### Abigail Donahue 18:01

Awesome. Um, all right, I think that exhausts my list of pre written questions. Awesome. Is there anything else that you want to tell me about like your experience running the tree house or it's a lot of work, a lot of work.

### Sam Masanby 19:03

It's a lot of work. It's a lot of problem solving. It's a lot of work it's the other interesting thing that we did is we didn't go on Airbnb. So we are not listed on Airbnb, I made a conscious decision to integrate a reservation system directly into our website a few reasons for that one. I knew I could market it and get a base without meeting Airbnb to I want to be exclusivity feel. And three, Airbnb hold your money, basically until a guest stays. And for us we wanted to reinvest that money back into the business. So being able to have that money at the time of rental allowed us to actually invest into the business and growth, which has been immensely helpful in being able to grow the ground. So I think that that's interesting and unique because a lot of people it's very hard to do. It's very hard to do on your own is to grow the assessing get rentals and everything like that often Airbnb or VRBO. But that's something that's very unique to us as a small business.

#### Abigail Donahue 20:07

Yeah, I can imagine I actually, when I first heard about you guys, I actually tried looking you up on Airbnb. And I found out very quickly, you're not on their list. Let's see. I thought I had another question. But it completely slipped my mind. Oh, what is there been any feedback that you've gotten from customers that has really stuck with you?

### Sam Masanby 20:37

that they've wanted for nothing staying there, which has been a huge compliment, I think has been one of the pieces that I've liked. People that have just said that they've fallen in love with me. The other piece too, is it's not really something that they've said. But it's more their actions. Like, we have a guest that booked there for a wedding anniversary came from Ohio two years ago. And then they rebooked for another week, the second year, and each time they come. They bring gifts for my daughter, you know when something for us. And that's been amazing. And just like, just things like that, like just getting to know these people and the relation, like I still text with some guests. It's just the relationships that we build with people has been very surprising and really amazing. And, you know, we don't like we have a couple of reviews like on our lodgify site. But we, you know, a lot of businesses rely on reviews like that and stuff like that. And for us the word of mouth and the fact that we continue to get business as to me that we're doing something right, without having to tell the public, what a great experience people have, you know what I mean? Like if a word of mouth has been enough. And to me that's that means more than any, you know, five star review. Yeah,

### Abigail Donahue 21:58

I think that also speaks a lot to the culture of Maine, we're not, it's not a very high like high tech, fast pace, place to live, it's very relaxed, it's very friendly.

### Sam Masanby 22:13

I'll say that piece of feedback that I got was that, at one point, we were told, we were never going to receive the price point that we were asking and that we were out of our minds. So, so with the price point, you know, we're first everybody was like, You're not gonna get this like, pushing back even like, even anchor did. Everybody did. And for us, we knew the value in what Rob and I could provide guests with, whether it was a concierge service, you know, the customizing, you know what kind of wine or down to the gluten free or vegan pancake, and having the accoutrements that you need to make those things every visit. We knew what we could bring as an experience because we'd love to travel, we know what we like when we travel. And so for us, we were like, my husband was like, we're going to hold the line, and then it and then it just started to go when it was like well, you know, we're so glad that we did, because we know that

the value is there for you. And, you know, that was hard to do for a little while and taking the how do I say less taking the negativity? And like the comments on Facebook? You know, like one woman I remember saying no, you're what she says she says, I feel like feel taken advantage of what these prices. And I was like well, I never really even took money from you lady. So you shouldn't feel taken advantage of. She didn't give me money. Not everybody can afford it. But there is a market out there and that's what we were out to serve was it completely to introduce in entirely different markets in this area, one that will go and book four nights at 750 a night, and not even blank, because there are people in the world that do exist. And we want to say, hey, come see a different part of me Come experience on Main that has beautiful lakes and mountains. And it's not the Cliff House or, you know, something that's along the coastline. But you know what I mean. And that's been really, really interesting. But I think like, that really stuck with me, because it was very challenging for me to deal with the public criticism. Because I just, I want everybody to like me, and we're not everybody likes you. And that has been challenging. But as you have a business, you have to start to realize you're not going to please everyone. And you just have to kind of own it. And so it's, it's been a growth opportunity. I think, for me personally, as a business owner, to own that even like with our hoodies, or whatever it is, you know, commanding the price that we do, people don't understand. And I'm like, Listen, I'm not trying to dupe you. I'm a small business, and I manufacturing as a non Ilbean.

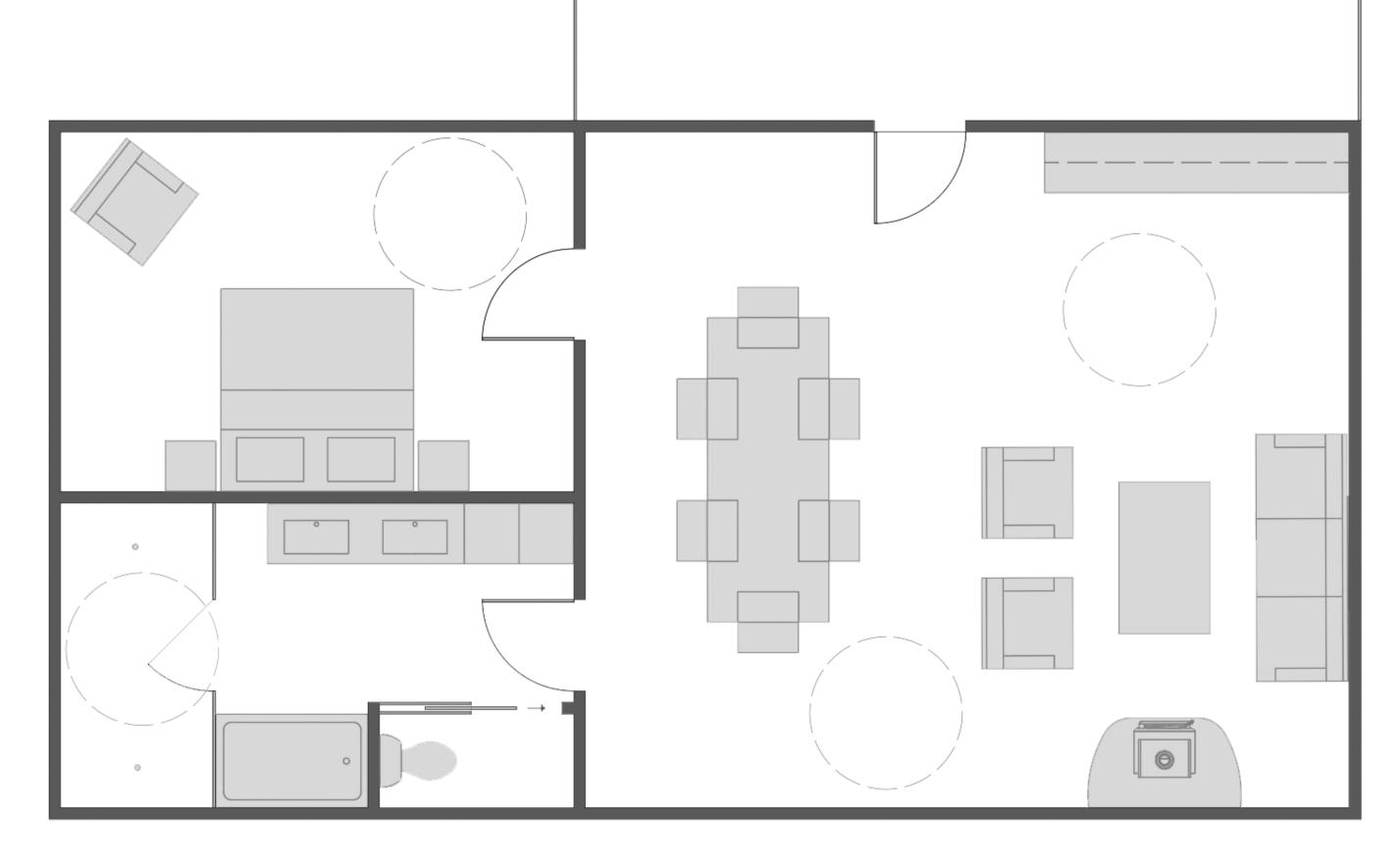
Transcribed by https://otter.ai



# Design Process: Initial Schematics, Material Selections and Site Documentation & Program

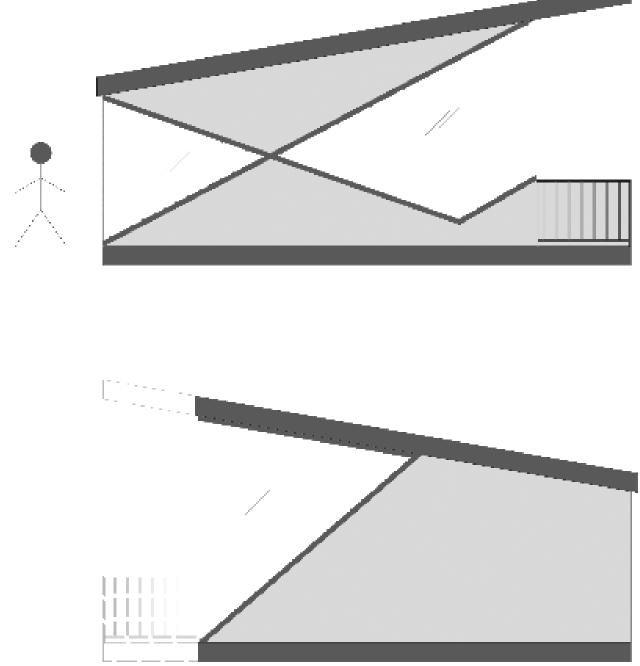


# 1 Bed Treehouse Plan View

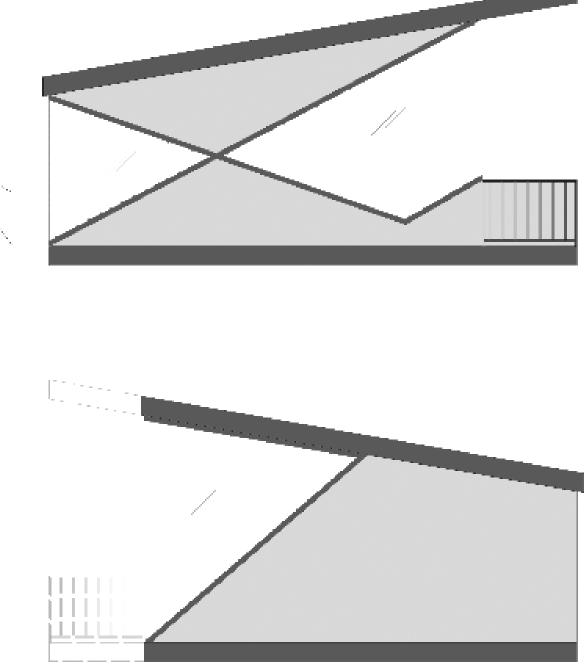


# Bed Treehouse 1 Exterior Elevations

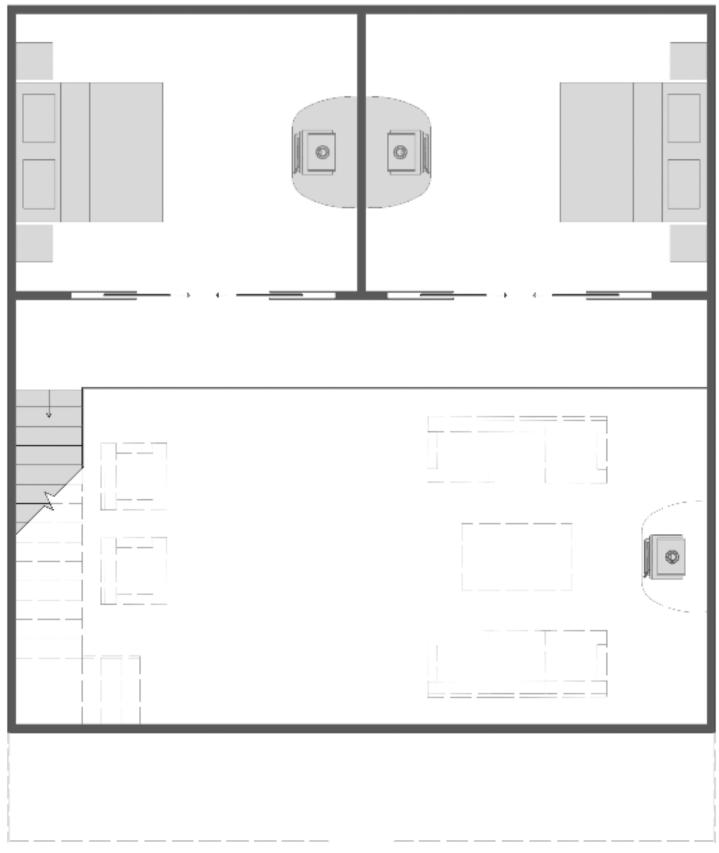


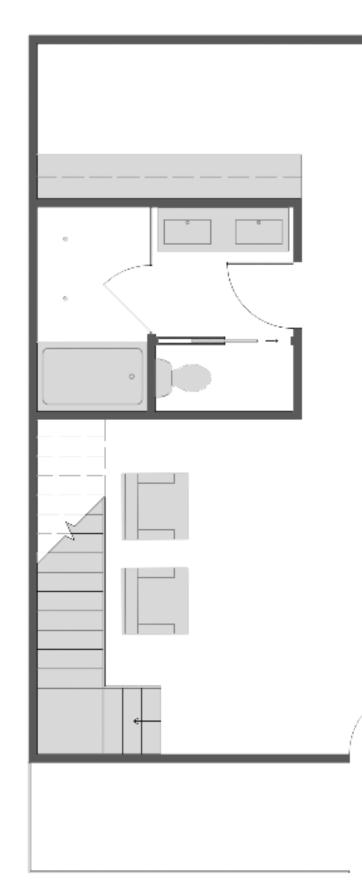


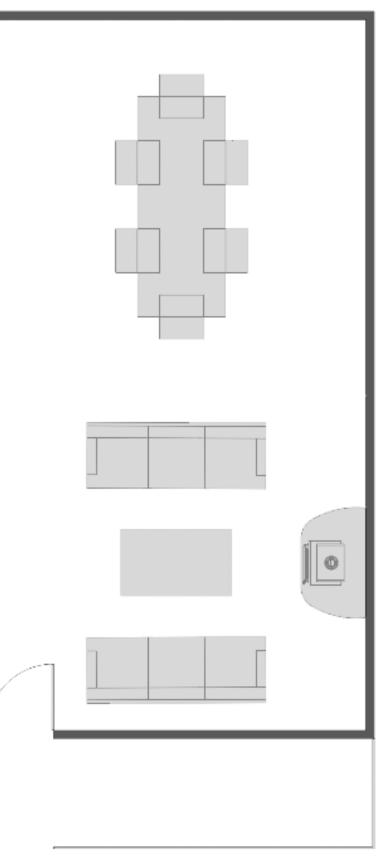




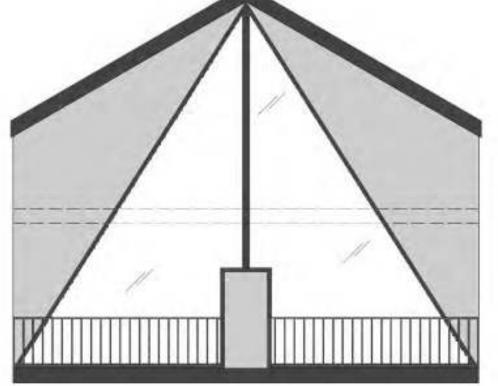
# 2 Bed Treehouse Plan

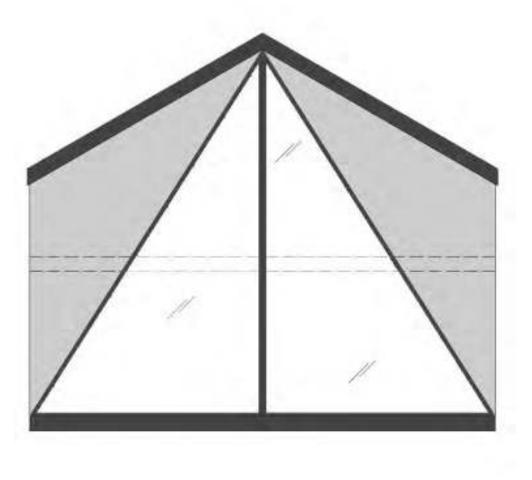


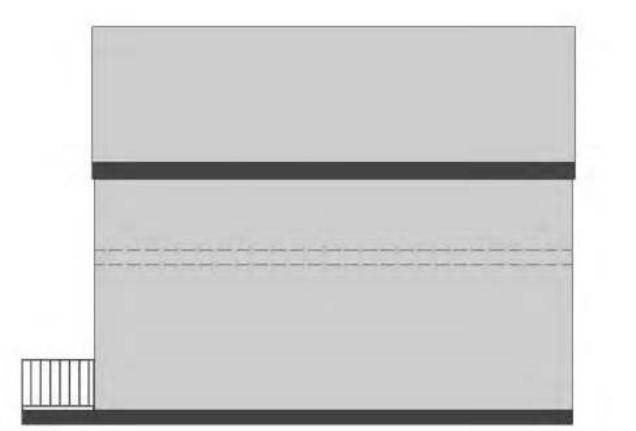


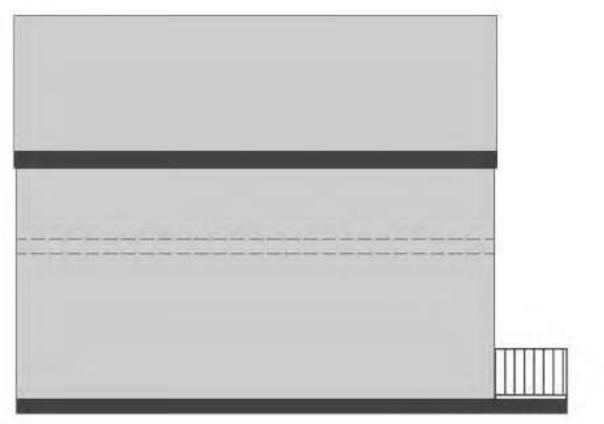


# 2 Bed Treehouse Exterior Elevations



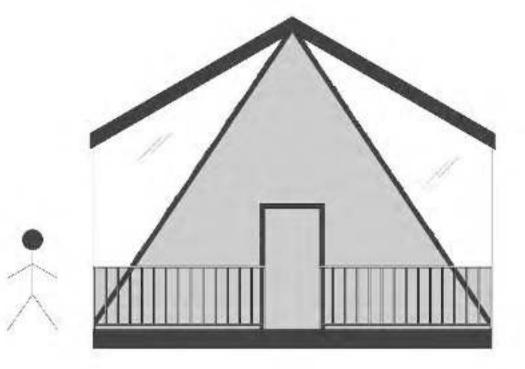


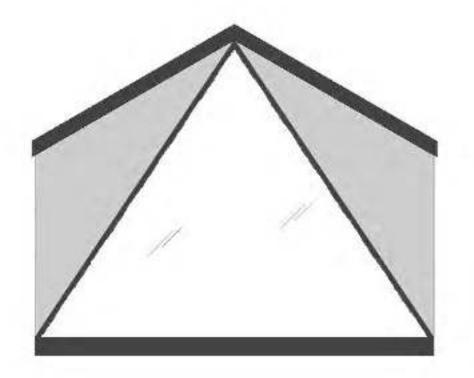




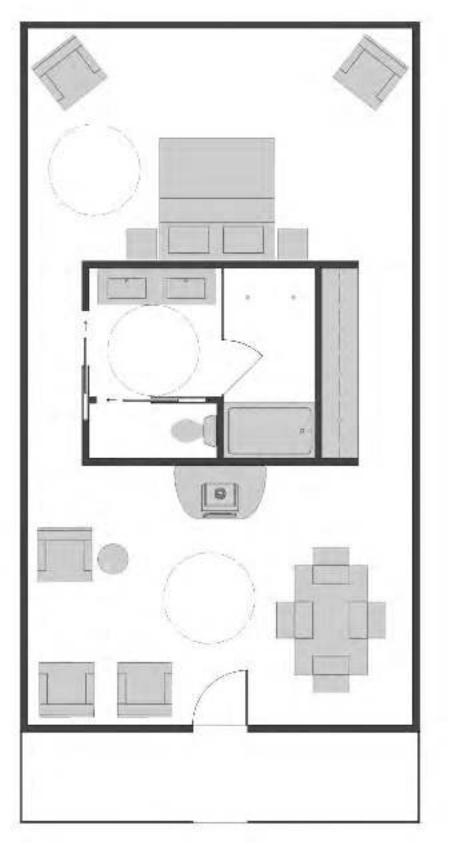
# Studio Treehouse

# Exterior Elevations

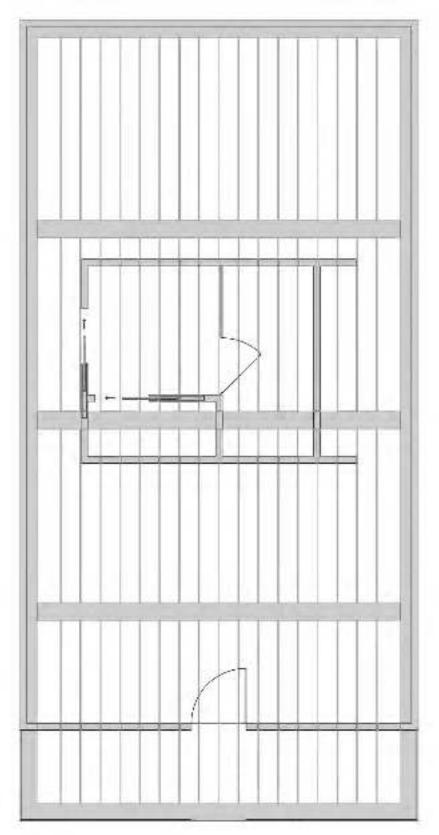




# Floor Plan

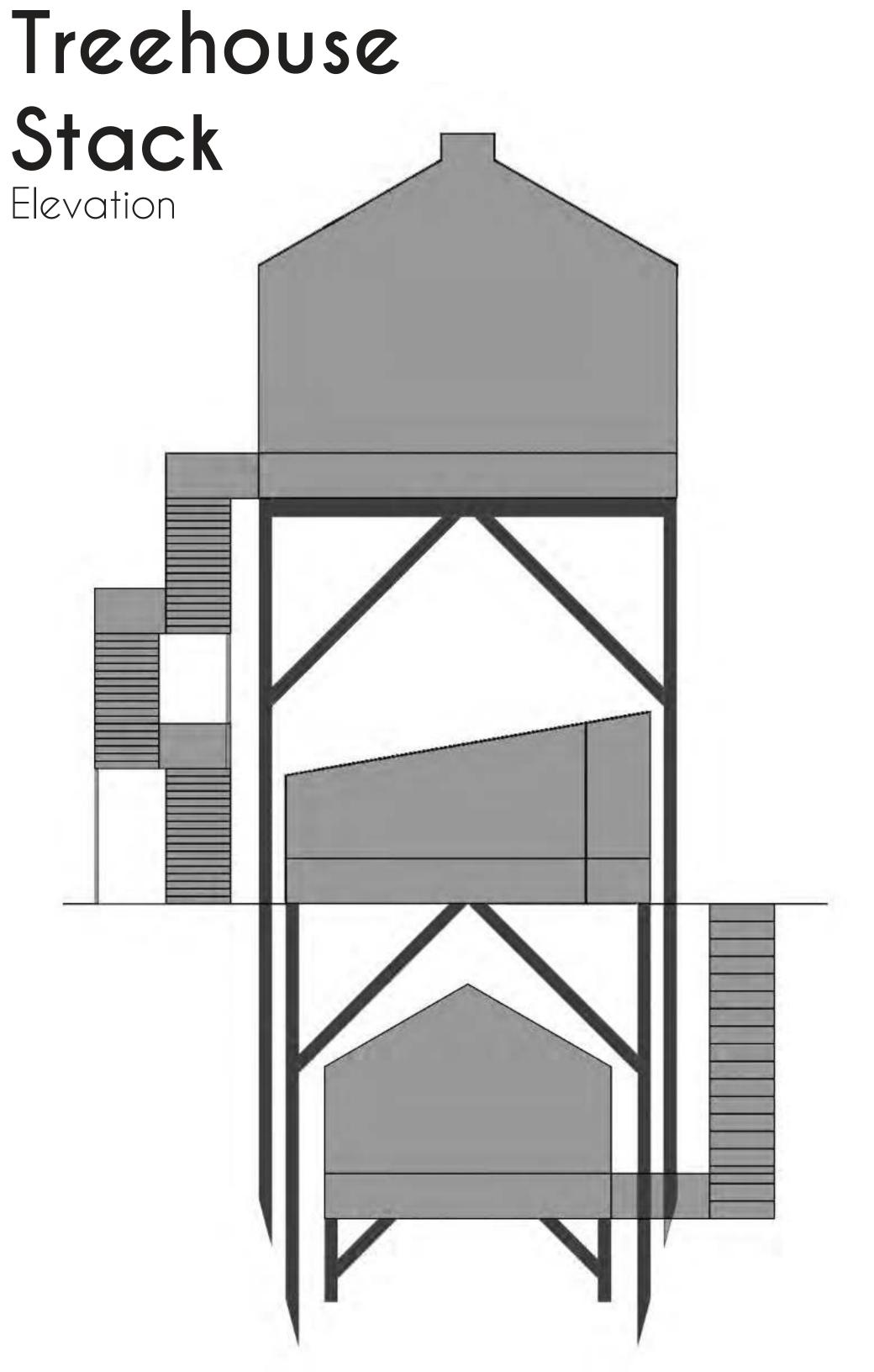


# Structure Plan

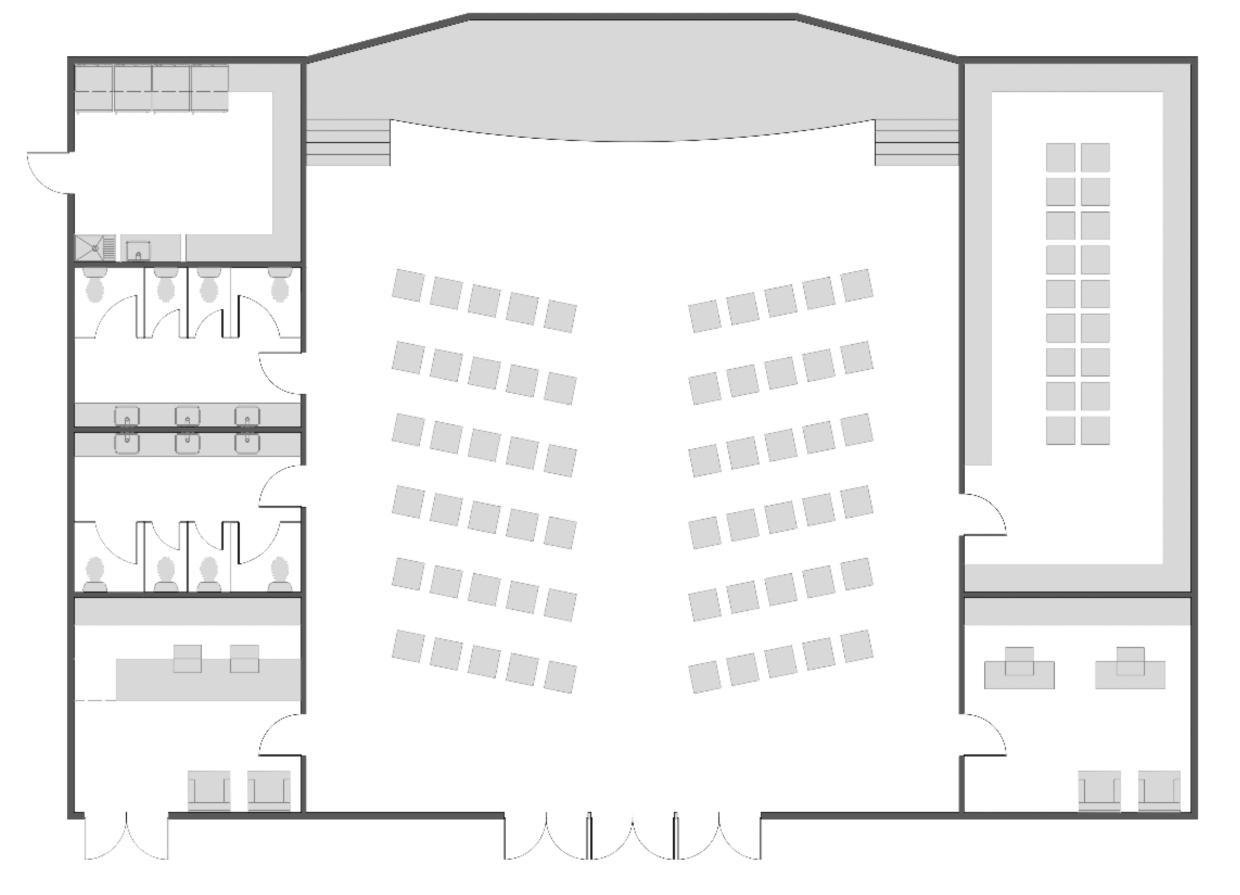


# Treehouse Stack Plan

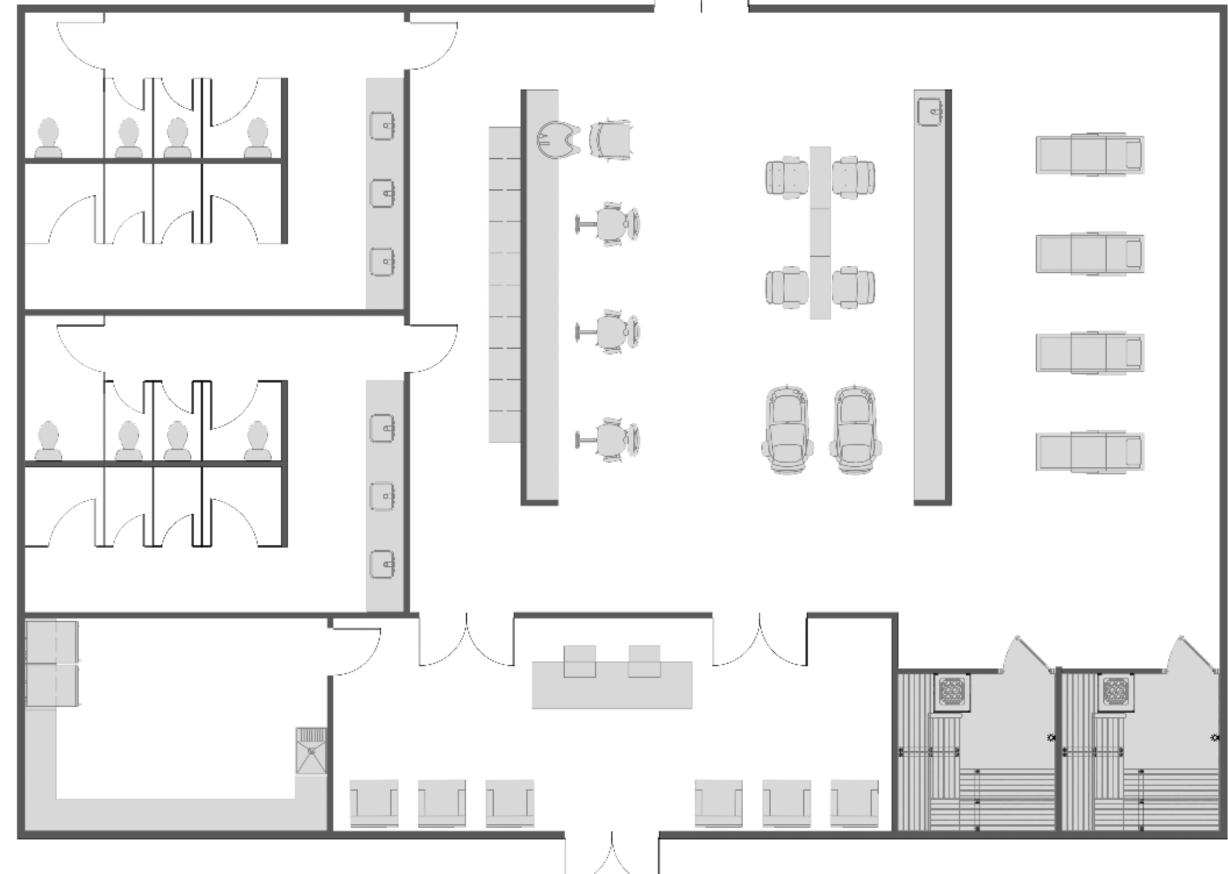

1		
 	1	
	1	
	i l	
	i i	
	i	
	i	



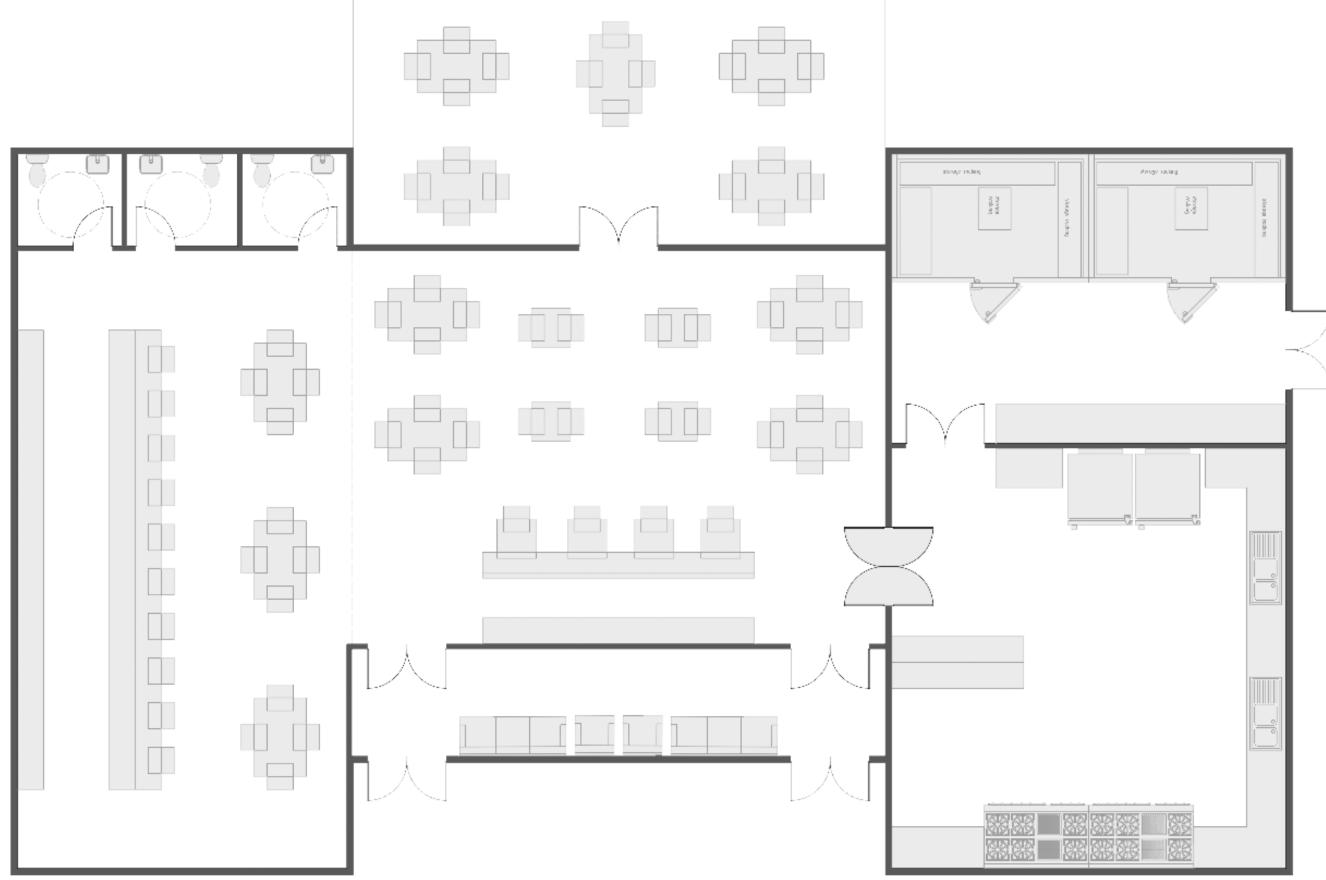
# Central Pavilion Plan



# **Uellness Pavilion** Plan



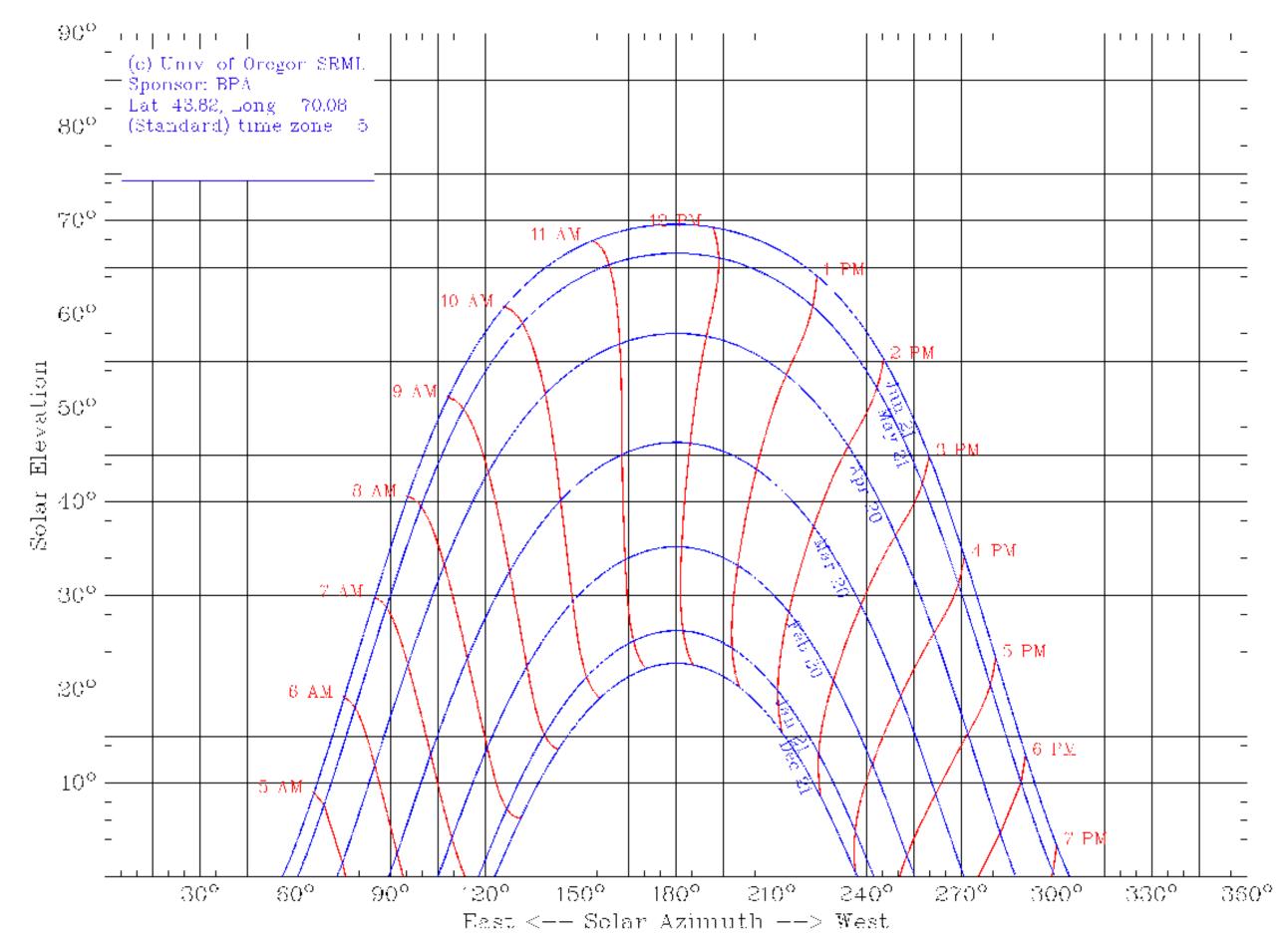
# Restauraunt Pavilion



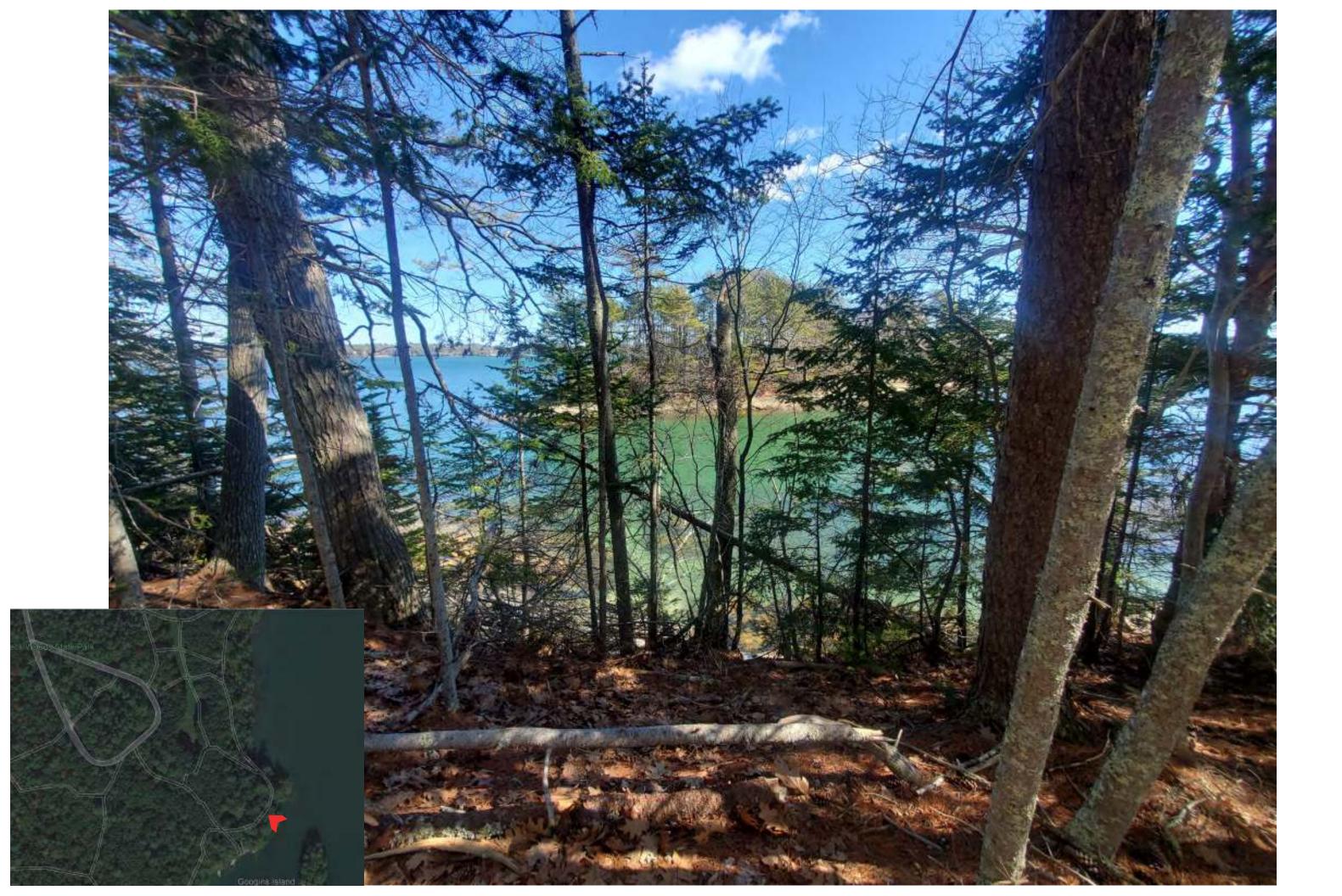
# To Scale Trail Map

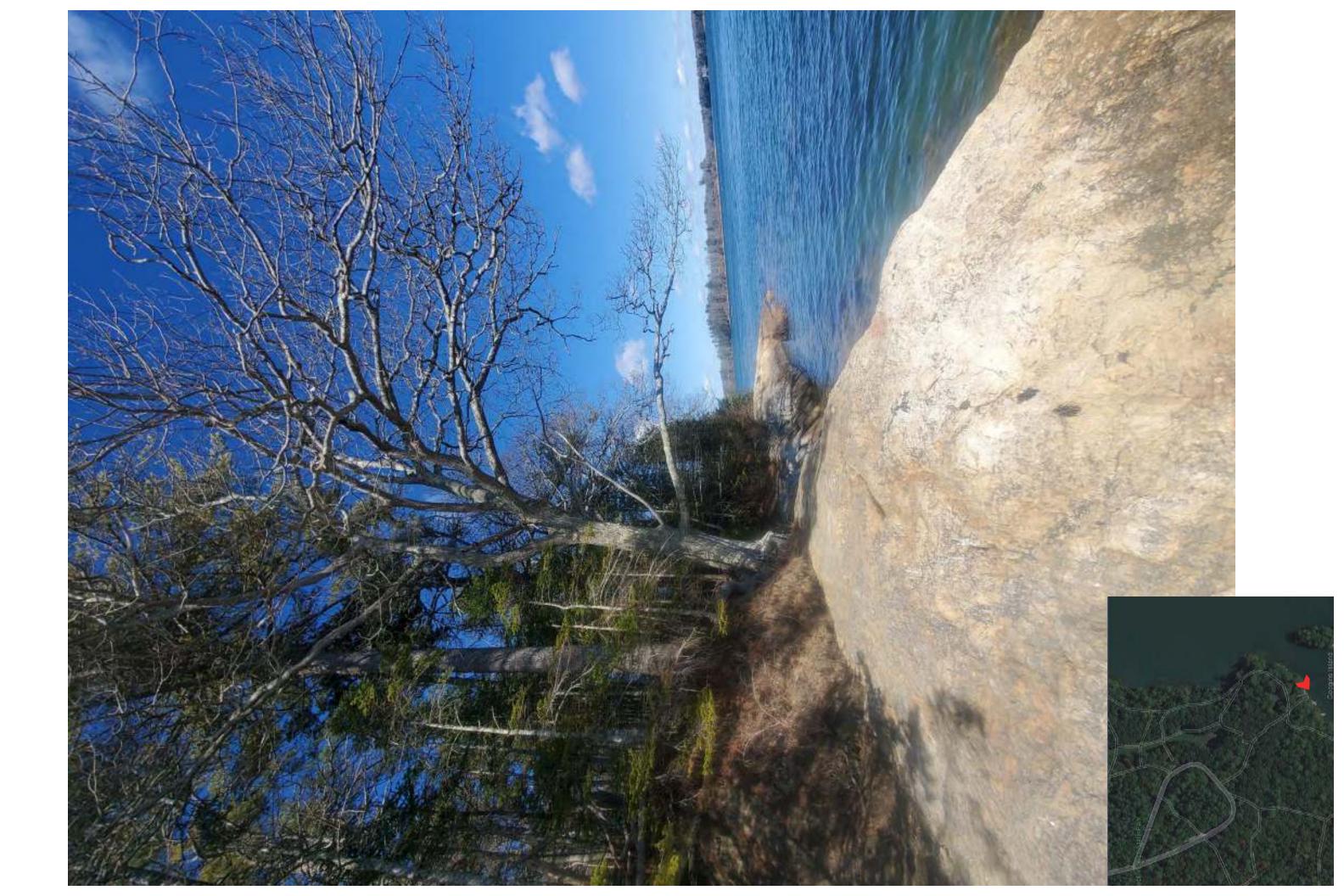


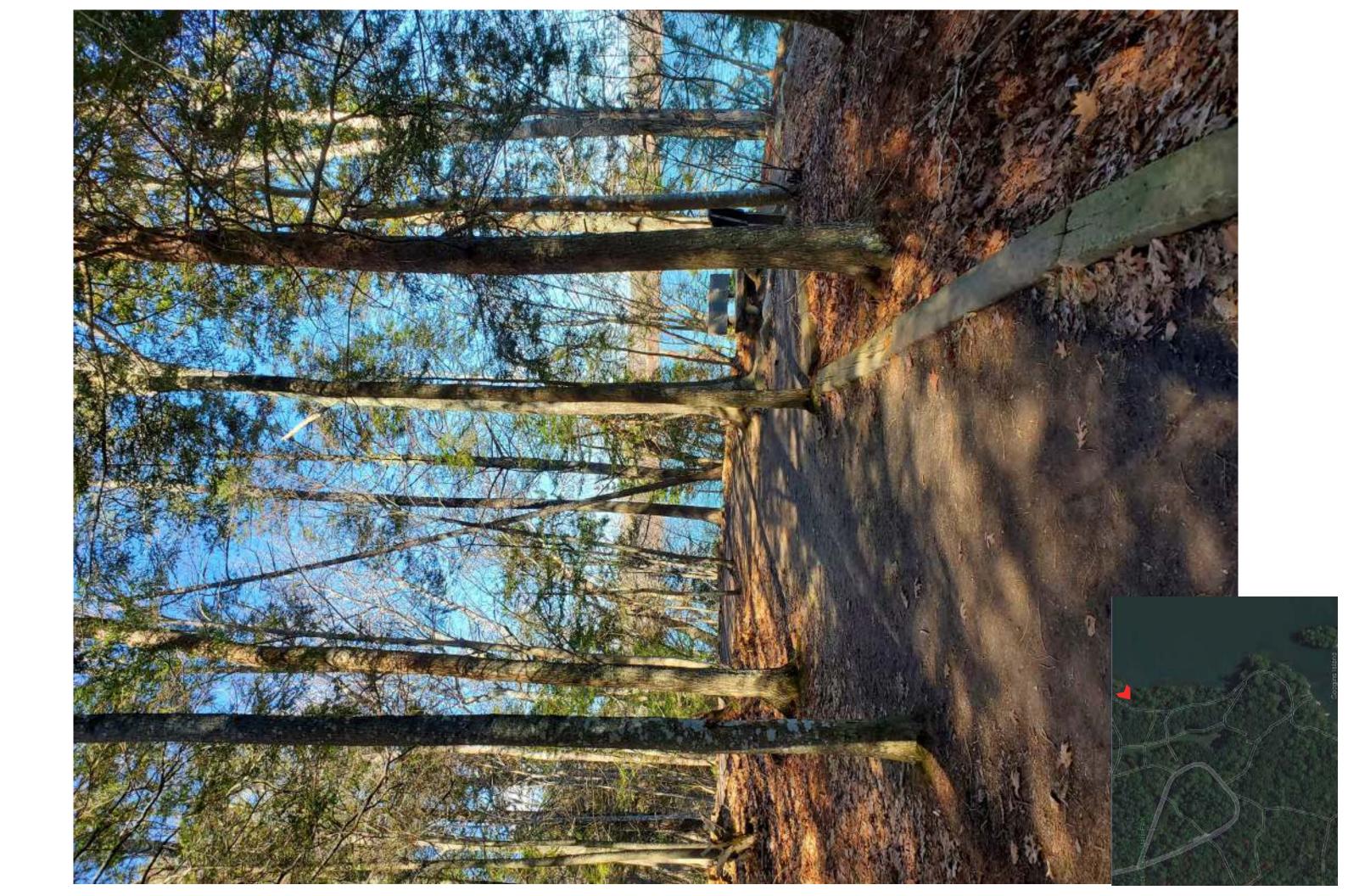
# Solar Study







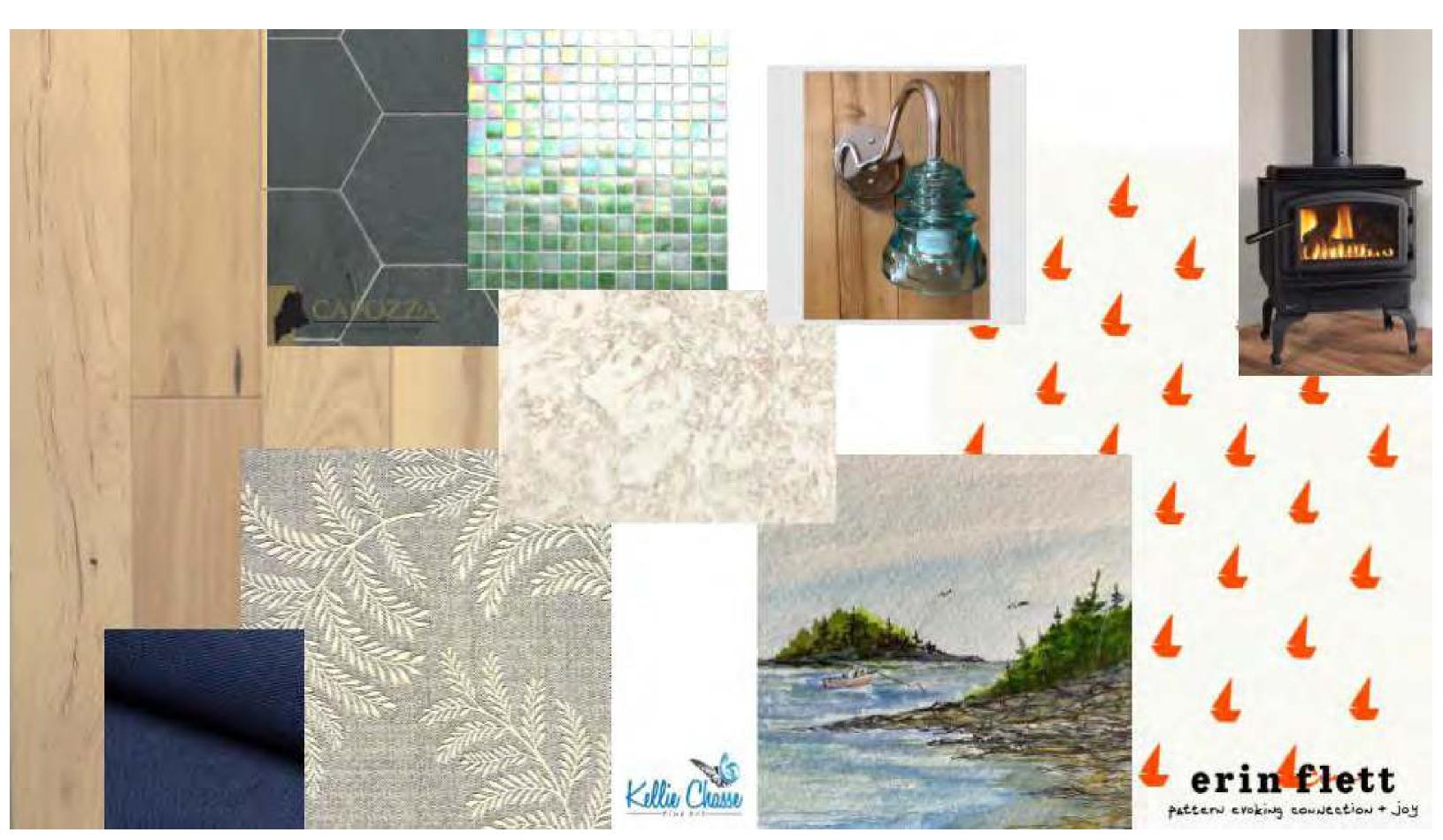












### Site Program



### Key:

1 - Park Entrance

2 - Restauraunt

3 - Parking + Shuttle Drop off

4 - Warden Tower

5 - Spa

- 6 Event Hall + Hotel Check-in
- 7 Golf Cart Lot
- 8 Treehouses

9 - Parking

10 - Picnic Field

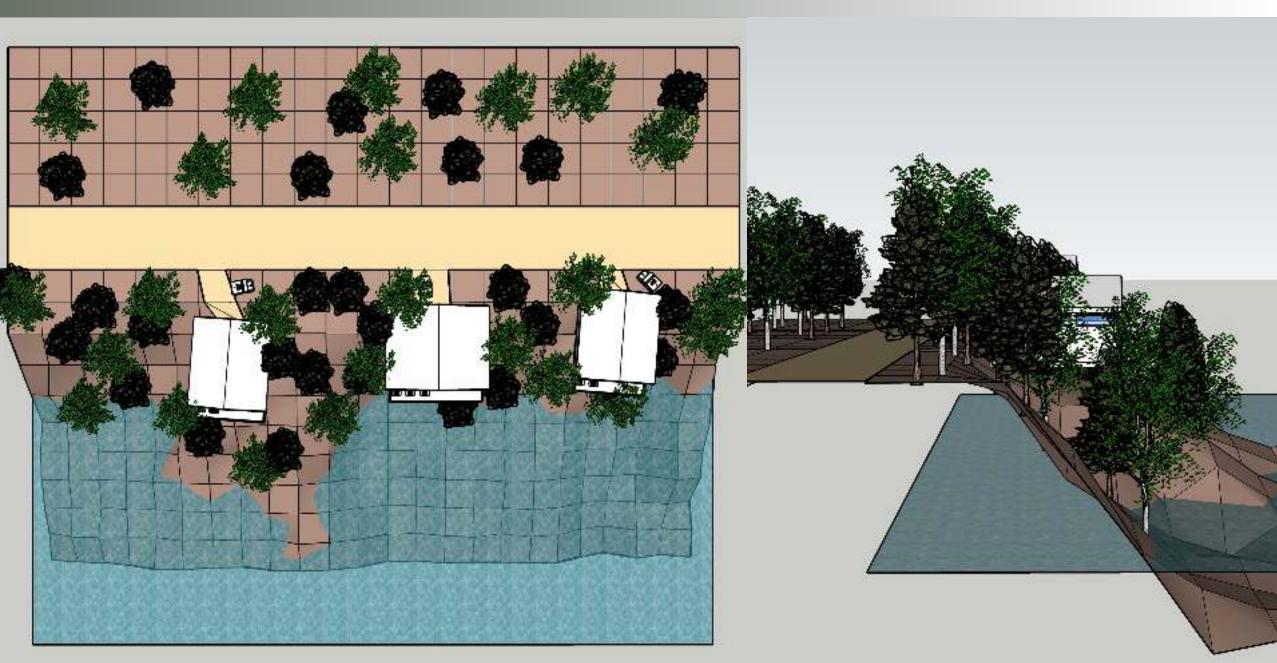


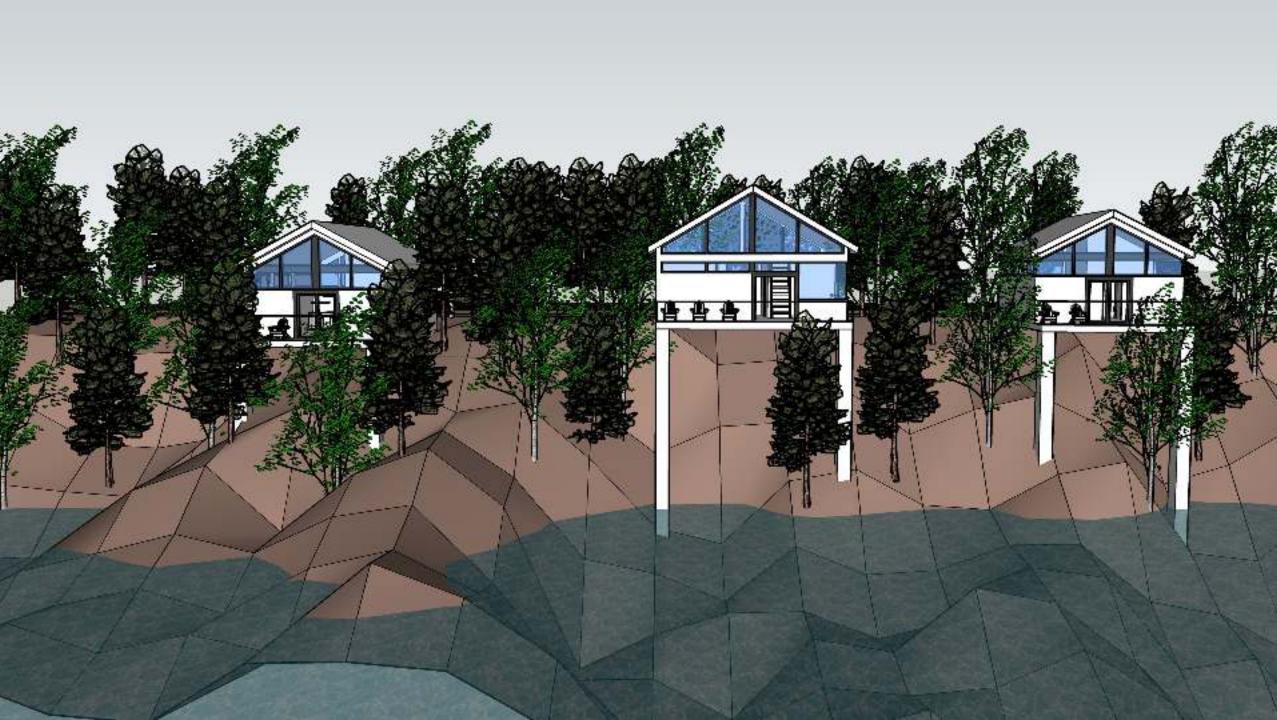
- Golf Cart Parking

- Hiking Trail

- Building

# 3D Site Visualization: Treehouse Ridge







# Code Research: Relevant Building & Zoning Codes State of Maine & Town of Freeport

### Maine Uniform Building and Energy Code

Maine Uniform Building and Energy Code (MUBEC) applies to all towns within the State of Maine. Enforcement of MUBEC is based on population or local action for communities under 4,000 residents as outlined in Chapter 1 (see below "MUBEC Rules and Laws.") MUBEC is made up of the following codes and standards:

- 2015 International Residential Code (IRC)
- 2015 International Building Code (IBC)
- 2015 International Existing Building Code (IEBC)
- 2015 International Energy Conservation Code (IECC)

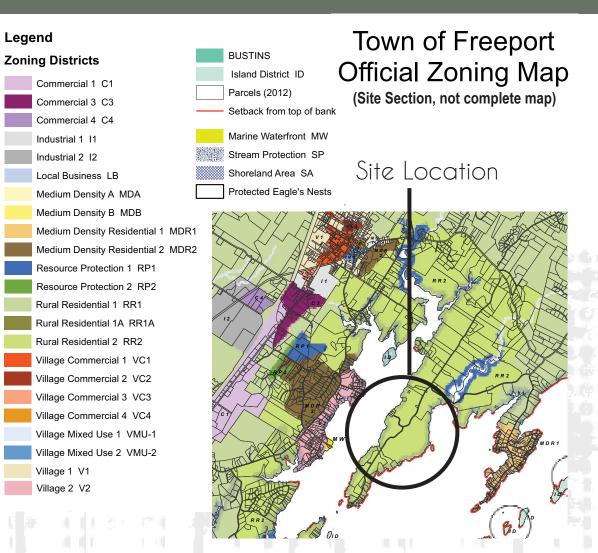
### Shoreland Zoning Ordinance of the Town of Freeport

The purposes of this Ordinance are to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, bird and wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to control building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas

This Ordinance applies to all land areas within 250 feet, horizontal distance, of the

- normal high-water line of any great pond or river,
- • upland edge of a coastal wetland, including all areas affected by tidal action, or
- upland edge of a freshwater wetland,

• • • and all land areas within 75 feet, horizontal distance, of the normal high-water line of a stream. This Ordinance also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending or located below the normal high-water line of a water body or within a wetland. The Shoreland Zones include Resource Protection 1, Shoreland Area, Stream Protection, and Marine Waterfront as defined in Section 304.



# Final Design: Rendered Floor Plans, Elevations, and Perspectives



# Treehouse: Moosehead Model Exterior Elevations and Floor Plan



# 11131 milli

## Treehouse: Moosehead Model Interior Elevations







### Treehouse: Katahdin Model Floor Plans



Ground Floor Plan



Loft Floor Plan

### Treehouse: Katahdin Model Exterior Elevations







# Treehouse: Katahdin Model Interior Elevation









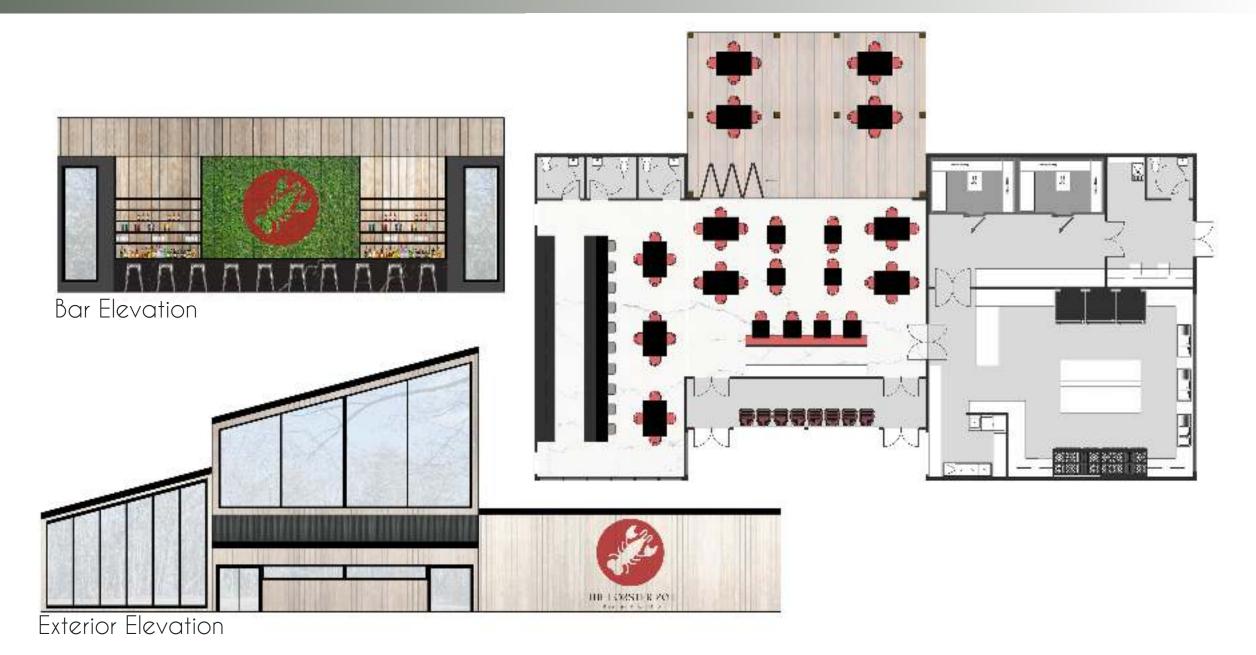
### Event Hall: Pine Tree Lodge Floor Plan and Elevations



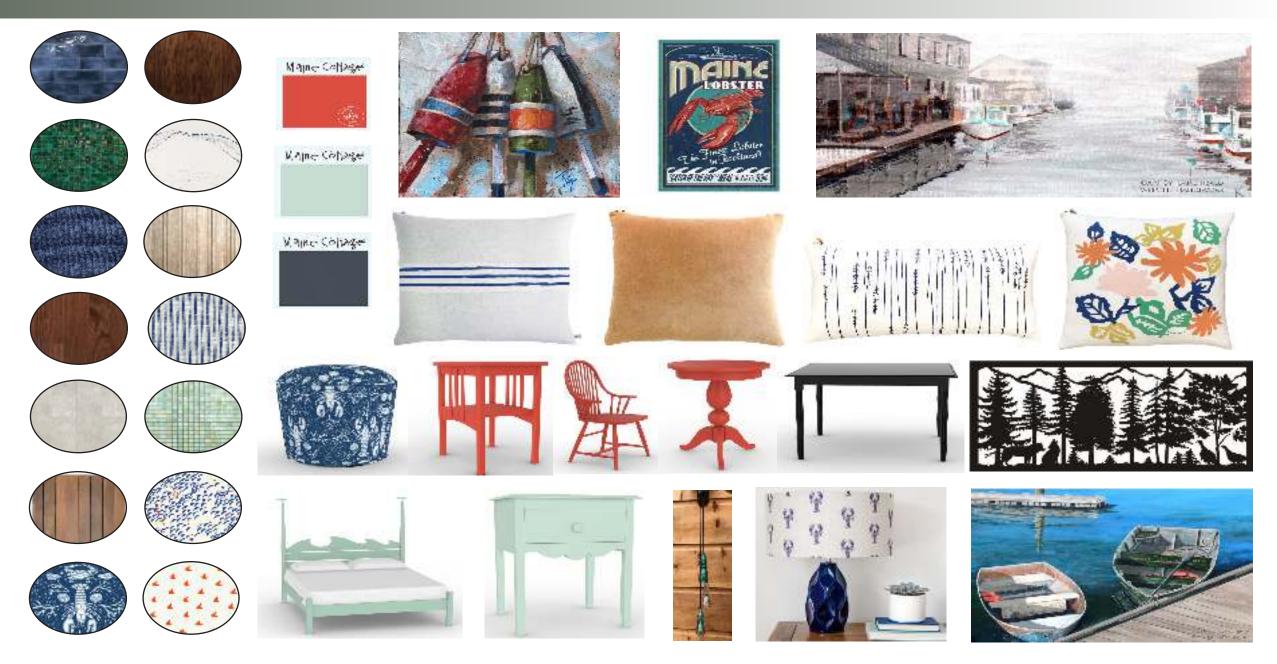
### Spa: Casco Bay Beauty Floor Plan and Elevations



# Restaurant: The Lobster Pot Floor Plan and Elevations



# Final Materials and Furniture Selections



### Final Material Sources: Maine Businesses and Artisans



Vaine Made A M E R I C A ' S

# erin flett

pattern evoking connection + joy

Snow Hill Lighting



OLD PORT

SPECIALTY TILE CO.

Mainely Handrails, LLC CUSTOM FAB SHOP



ARTISAN CSF

Maine Cottage



